COLOR BY

SEQUENCE LISTING

Graff, Jonathon M. Muenster, Matthew

<120> METHODS TO IDENTIFY SIGNAL SEQUENCES

<130> A34943 090495.0243

<140> 10/002,631

<141> 2001-10-31

<150> 60/300,309

<151> 2001-06-21

<160> 324

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 884

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (608)...(884)

 $\langle 223 \rangle$ n = A, C, G or T

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<211> 288

<212> PRT

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<220>
<221> UNSURE
<222> (1)...(93)
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                                25
Gly Xaa Lys Tyr His Xaa Cys Ser Gly Phe Xaa Xaa Leu Xaa Xaa Gly
Leu Xaa Arg Glu Xaa Leu Ser Leu Pro Leu Thr Lys Gly Ser Asp Ser
                        55 -
Thr Leu Xaa Pro Arg Ala Ser Ser Ser Lys Lys Leu Asn Asn Asn
                                        75
Ser Ser Phe Tyr Thr Gly Val Tyr Ile Leu Ile Xaa Ala Gly Ala Leu
Met Met Leu Val Gly Phe Leu Gly Cys Cys Gly Ala Val Gln Glu Ser
            100
                                105
Gln Cys Met Leu Gly Leu Phe Phe Gly Leu Pro Leu Gly Asp Ile Arg
                            120
                                                 125
His Asn Ser Cys Gly His Leu Gly Ile Phe Pro Gln Gly Gly Asp Gly
                        135
                                            140
Ser Pro Gly Val Leu Gln Gly His Leu Gln Gln Ala Glu Asn Gln Gly
                    150
                                        155
Ala Pro Ala Gly Asn Ala Glu Ser His Pro Leu Cys Val Glu Leu Leu
                165
                                    170
Trp Phe Gly Trp Gly Arg Gly Thr Val Tyr Leu Arg His Leu Pro Gln
                                185
Glu Gly Arg Thr Arg Asn Leu His Arg Glu Val Leu Ser Cys His Gln
                            200
Arg Gly Leu Arg Gln Ile Pro His His Arg Arg Ser Gly His Arg His
    210
                        215
                                            220
Cys Arg Gly His Asp Ile Trp His Asp Leu Gln Tyr Asp Leu Val Leu
225
                    230
                                        235
Cys Tyr Pro Gln Glu Pro Arg Asp Gly Leu Glu Ser Ala Tyr Ile Pro
                245
                                    250
Glu Gln Glu Ser Leu Pro Met Lys Ile Gly Gly Ile Phe Cys Leu Phe
            260
                                265
Val Leu Phe Cys Leu Leu Phe Val Val Cys Phe Phe Ala Thr Gly Ser
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<213> Homo sapiens

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tacggcgcct ggcatagagt gcactgaggg tgaagcaggt aaagatcatt gccgtgccca 180
tgaaagcagt gggaaggatg ctggggttga cagcaataca aaactccagg gcagggccca 240
ggccaactcc tgtaaggaat gcaaatccag caagaagtcc cagtcttttc tgttcagttt 300
catggctatg aggtgttgcc atcagccaaa tcatcaatat cagggagccc aaggcagaca 360
gcaggccage etgaatgaaa tgagtgacca tatggacata ggcccctgca geegccacaa 420
acatacaaag ggcaaaactt gcatagacct tcttcaggtg ctgctgcgtt gacggggtta 480
tatgagaaaa ttttaaaagc gcatcaaagg tcgacgcggc cgcgaattc
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<213> Homo sapiens
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Ile Thr Pro Ser Thr Gln Gln His Leu Lys Lys Val Tyr Ala Ser Phe
                                                     30
                                25
Ala Leu Cys Met Phe Val Ala Ala Ala Gly Ala Tyr Val His Met Val
                            40
Thr His Phe Ile Gln Ala Gly Leu Leu Ser Ala Leu Gly Ser Leu Ile
                                             60
                        55
Leu Met Ile Trp Leu Met Ala Thr Pro His Ser His Glu Thr Glu Gln
                                         75
                    70
65
Lys Arg Leu Gly Leu Leu Ala Gly Phe Ala Phe Leu Thr Gly Val Gly
                                     90
Leu Gly Pro Ala Leu Glu Phe Cys Ile Ala Val Asn Pro Ser Ile Leu
                                 105
Pro Thr Ala Phe Met Gly Thr Ala Met Ile Phe Thr Cys Phe Thr Leu
                                                 125
                            120
Ser Ala Leu Tyr Ala Arg Arg Ser Tyr Leu Phe Leu Gly Gly Ile
                                             140
                        135
Leu Met Ser Ala Leu Ser Leu Leu Leu Ser Ser Leu Gly Asn Val
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145
Phe Phe
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<210> 5 <211> 454 <212> DNA <213> Homo sapiens

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gtacatacac aaaaaagtta ctggaatgct cggaataaga ttgtttttct gttgtcattt 180
ttgctttttt tacaaggttt tttttctcct ttgagattat aatgaacatg gtcacaccac 240
aagtaaagtc agaagtagga cagagaacgc tccgaaggct ggtttggtca tccqagatca 300
ttaaaaatgg ctgaccctaa caatatgtac aaaaatataa aatgtaaata aaaaatacaa 360
acaaatttcc tttttaaagt actttaagaa aaaaagcagg gccttggaag ttttggttct 420
tttttcctcc cctggtcgac gcggccgcga attc
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<212> PRT
<213> Homo sapiens
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                                     10
Lys Ala Leu Leu Phe Phe Leu Lys Tyr Phe Lys Lys Glu Ile Cys Leu
                                 25
Tyr Phe Leu Phe Thr Phe Tyr Ile Phe Val His Ile Val Arg Val Ser
His Phe Ser Arg Met Thr Lys Pro Ala Phe Gly Ala Phe Ser Val Leu
                         55
Leu Leu Thr Leu Leu Val Val Pro Cys Ser Leu Ser Gln Arg Arg Lys
                                         75
                                                             80
Lys Thr Leu Lys Lys Gln Lys Gln Gln Lys Asn Asn Leu Ile Pro Ser
                                     90
Ile Pro Val Thr Phe Leu Cys Met Tyr Leu Ala Val Leu Val Val Gly
                                105
                                                     110
Leu Tyr Glu Met Val Lys Lys Ala Lys Asp Lys Arg Phe Leu Phe Phe
                            120
Ser Phe Phe Val Tyr Glu Val Ala Val Tyr Phe Phe Trp Pro Gly Ser
    130
                        135
                                             140
<210> 7
<211> 478
<212> DNA
<213> Homo sapiens
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gagaaaagca gcgattcttc ctttcagagt tctccatggc tcagaaaatg cccaagacat 120
catgtatgtg acttagatac tgctttttgg gaggttaaga gtagcatgaa gaacttaaga 180
tgacgataag agtctaaatt tttagtttca aggtttcaat agaatgtgga tatattcaaa 240
actttcaaaa aggacagtgt ttagaaaggg taaaactagg acacagaaaa cactgggaat 300
taccacgacc cccaagtgct tccggctcca ggaaataacc attcatgtgt ttgctggagg 360
tcacacaatt ttcccctatt acctggtgca aaatgactca tcacttccca aaagcttctt 420
ttcaaaccac gattttccca tttattttgg tccaatgcgt cgacgcggcc gcgaattc
                                                                   478
<210> 8
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<211> 150

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<212> PRT
<213> Homo sapiens
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Phe Glu Lys Lys Leu Leu Gly Ser Asp Glu Ser Phe Cys Thr Arg Gly
            20
                                 25
Lys Ile Val Pro Pro Ala Asn Thr Met Val Ile Ser Trp Ser Arg Lys
                             40
His Leu Gly Val Val Ile Pro Ser Val Phe Cys Val Leu Val Leu
                        55
Pro Phe Leu Asn Thr Val Leu Phe Glu Ser Phe Glu Tyr Ile His Ile
Leu Leu Lys Pro Asn Lys Phe Arg Leu Leu Ser Ser Ser Val Leu His
                                    90
Ala Thr Leu Asn Leu Pro Lys Ser Ser Ile Val Thr Tyr Met Met Ser
                                105
                                                     110
Trp Ala Phe Ser Glu Pro Trp Arg Thr Leu Lys Gly Arg Ile Ala Ala
                            120
Phe Leu Lys Gln Ile Gly Phe Leu Met Ser Phe Gly Ser Pro Cys Leu
                        135
                                             140
Leu Leu Met Leu Gly Ser
145
                    150
<210> 9
<211> 770
<212> DNA
<213> Homo sapiens
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<221> unsure
<222> (545)...(757)
<223> n = A, C, G or T
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gttgagttgg tccagccctg ggctgacaag ggtgagatct gcctgaccct ctccagtgag 120
agtaactcca gtcacttccc ctgccacgtc ccaggtgcct agggaggcag tcaggttcac 180
ctggtatacc teetgaceag aagetgeetg aaggeteage eetggeacea agatgeteet 240
gaggggctga acttccacac cctgtagggg gtactggagc ggggagttgg caggggctat 300
gagcagctgg tcagctgggg actggctcct cgacagaaag gcctggaact cctgctctct 360
tgtggcagag gcagccctca gctctgcagg gtcaaaggcc ttggtgaggt caatagctcg 420
gacttgtttc tggaagggga gggggaggcc cccccactq qactcacaac tgcagttgtt 480
ccaagccagc agccccacta cttgctcctt gatcctgacc gggatgtgtg cctaqcgqqg 540
ctcangagca agatetggca getegggeet gegggggett tgegggggeg eccaeggege 600
aagaagtacc cggangcccg ggcgccgtnc cgggtgctcg cgtacaggan ccccancgag 660
gccaagccna ccagaaggac caaaacgcac aagggcccgg cgggccaacc acatcctgct 720
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                                                                   770
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<210> 10
 <211> 255
 <212> PRT
 <213> Homo sapiens
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 <221> UNSURE
 <222> (5)...(75)
 <223> Xaa = Any amino acid
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Ser Arg Met Trp Leu Ala Arg Arg Ala Leu Val Arg Phe Gly Pro Ser
                                 25
Gly Xaa Leu Gly Leu Xaa Gly Xaa Pro Val Arg Glu His Pro Xaa Arg
Arg Pro Gly Xaa Arg Val Leu Leu Ala Pro Trp Ala Pro Pro Gln Ser
                                             60
Pro Arg Arg Pro Glu Leu Pro Asp Leu Ala Xaa Glu Pro Arg Ala His
                     70
Ile Pro Val Arg Ile Lys Glu Gln Val Val Gly Leu Leu Ala Trp Asn
                                     90
Asn Cys Ser Cys Glu Ser Ser Gly Gly Leu Pro Leu Pro Phe Gln
            100
                                 105
Lys Gln Val Arg Ala Ile Asp Leu Thr Lys Ala Phe Asp Pro Ala Glu
                             120
                                                 125
Leu Arg Ala Ala Ser Ala Thr Arg Glu Glu Phe Gln Ala Phe Leu
    130
                         135
                                             140
Ser Arg Ser Gln Ser Pro Ala Asp Gln Leu Leu Ile Ala Pro Ala Asn
                    150
                                         155
Ser Pro Leu Gln Tyr Pro Leu Gln Gly Val Glu Val Gln Pro Leu Arg
                165
                                     170
Ser Ile Leu Val Pro Gly Leu Ser Leu Gln Ala Ala Ser Gly Gln Glu
                                185
Val Tyr Gln Val Asn Leu Thr Ala Ser Leu Gly Thr Trp Asp Val Ala
                            200
                                                 205
Gly Glu Val Thr Gly Val Thr Leu Thr Gly Glu Gly Gln Ala Asp Leu
                        215
                                             220
Thr Leu Val Ser Pro Gly Leu Asp Gln Leu Asn Arg Gln Leu Gln Leu
                                        235
Val Thr Tyr Ser Ser Arg Ser Tyr Gln Thr Asn Thr Ala Gly Ser
                245
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<210> 11

<211> 480

<212> DNA

<213> Homo sapiens

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cccgcggccg tgcagcaggg cgtgcagcgg cttctcctcg tcctgccggg ggaggcagcg 180
cagecectgg gegeageget eggtgtagae geegeacgae tgeeeetegg eeagggegea 240
ggtcatgcag cagccgcagc ccggctcctt gaccagctcg cagcccaggg ggctgggggg 300
gcacatggag agggctttct cgtcgcaggg ctcgcagtgc acgaaggagc ccaggctctg 360
ggccggcccc gcataggcgg ccagcagcag gaggaccgcg gtgagcaaca ccatcttctc 420
ttagtcgccc cctttacctc ggggtggggc aggaaaagcg gtcgacgcgg ccgcgaattc 480
<210> 12
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<212> PRT
<213> Homo sapiens
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Gly Gly Asp Glu Lys Met Val Leu Leu Thr Ala Val Leu Leu Leu
                                 25
Ala Ala Tyr Ala Gly Pro Ala Gln Ser Leu Gly Ser Phe Val His Cys
                             40
Glu Pro Cys Asp Glu Lys Ala Leu Ser Met Cys Pro Pro Ser Pro Leu
                                             60
Gly Cys Glu Leu Val Lys Glu Pro Gly Cys Gly Cys Met Thr Cys
                    70
                                         7:5
                                                             80
Ala Leu Ala Glu Gly Gln Ser Cys Gly Val Tyr Thr Glu Arg Cys Ala
                                     90
Gln Gly Leu Arg Cys Leu Pro Arg Gln Asp Glu Glu Lys Pro Leu His
                                 105
Ala Leu Leu His Gly Arg Gly Val Cys Leu Asn Glu Lys Ser Tyr Arg
                             120
                                                 125
Glu Gln Val Lys Ile Glu Arg Asp Ser Arg Glu His Glu Glu Pro Thr
                        135
Thr Ser Glu Met Ala Glu Glu Thr Tyr Ser Pro Pro Gly Ser
145
                    150
                                         155
<210> 13
<211> 949
<212> DNA
<213> Homo sapiens
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<221> unsure
<222> (527)...(945)
\langle 223 \rangle n = A, C, G or T
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tcatttttca tgcacaacct ttcccccagt gcaaaagact gttactttat tattgtattc 180
aaaattcatt gtgtatatta ctacaaagac aaccccaaac caatttttt cctgcgaagt 240
ttaatgatcc acaagtgtat atatgaaatt ctcctccttc cttgcccccc tctctttctt 300
ccctctttcc cctccagaca ttctagtttg tggagggtta tttaaaaaaa caaaaagga 360
agatggtcaa gtttgtaaaa tatttgtttg tgctttttcc ccctccttac ctgaccccct 420
acgagtttac aggtctgtgg caatactctt aaccataaga attgaaatgg tgaagaaaca 480
agtatacact agaggctctt aaaagtattg aaagacaata ctgctgntat atagcaagac 540
ataaacagat tataaacatc agagccattt gcttctcagt ttacatttct gatacatgca 600
gatagcagat gtctttaaat gaaatacatg tatattgngt atggacttaa ttatgcacat 660
gctcagatgt gtagacatcc tncgnatatt tacataacat atngaggtaa tagatagggg 720
gatatacctg gatncattct caaganattg cttggaccga aggttncaag gaccccaaac 780
cctttgggcc ttttttaccc ccaanatggn ccttgggaat caaattcctt nngqaaatgg 840
nccttnaana aacttngntt ttttgcnttt tgaaaaaagg ccatgggnca ttggnanttn 900
nggngggccn ccttancccc tttaaaatta nnnttctntt tgggnggct
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<222> (2)...(135)
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                                25
Gly Pro Phe Pro Xaa Gly Ile Phe Pro Arg Xaa Xaa Leu Gly Val Lys
                            40
Lys Ala Gln Arg Val Trp Gly Pro Xaa Asn Leu Arg Ser Lys Gln Xaa
                        55
Leu Glu Asn Xaa Ser Arg Tyr Ile Pro Leu Ser Ile Thr Ser Ile Cys
                                        75
                                                             80
Tyr Val Asn Xaa Arg Arg Met Ser Thr His Leu Ser Met Cys Ile Ile
                85
Lys Ser Ile Xaa Asn Ile His Val Phe His Leu Lys Thr Ser Ala Ile
            100
                                105
Cys Met Tyr Gln Lys Cys Leu Arg Ser Lys Trp Leu Cys Leu Ser
                            120
                                                125
Val Tyr Val Leu Leu Tyr Xaa Ser Ser Ile Val Phe Gln Tyr Phe Glu
                        135
                                            140
Pro Leu Val Tyr Thr Cys Phe Phe Thr Ile Ser Ile Leu Met Val Lys
                    150
                                        155
                                                            160
Ser Ile Ala Thr Asp Leu Thr Arg Arg Gly Ser Gly Lys Glu Gly Glu
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165
                                      170
 Lys Ala Gln Thr Asn Ile Leu Gln Thr Pro Ser Ser Phe Phe Val Phe
             180
                                  185
 Leu Asn Asn Pro Pro Gln Thr Arg Met Ser Gly Gly Glu Arg Gly Lys
                              200
                                                  205
 Lys Glu Arg Gly Ala Arg Lys Glu Glu Asn Phe Ile Tyr Thr Leu Val
                         215
                                              220
 Asp His Thr Ser Gln Glu Lys Asn Trp Phe Gly Val Val Phe Val Val
 225
                     230
                                          235
 Ile Tyr Thr Met Asn Phe Glu Tyr Asn Asn Lys Val Thr Val Phe Cys
                 245
                                      250
                                                          255
 Thr Gly Gly Lys Val Val His Glu Lys Asn Lys Asn Ser Cys Trp Asp
             260
                                 265
                                                      270
 Phe Ile Met Leu Leu Thr Val Trp Phe Val Trp Phe Cys Leu Leu
                             280
Ile Phe Ser Leu Leu Pro Ala Trp Leu Cys Gln Thr Asn Gln Gly
                                             300
 Ser
 305
<210> 15
<211> 613
<212> DNA
<213> Homo sapiens
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<221> unsure
<222> (571)...(571)
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gttcctgctc agttttggtc ttttttggtg cattggtctc ctcactttca ctctctgaga 180
tetecteact ecgaecetge ttgttgaect ttggggtgga ggetteetet actegggeet 240
tcttggctgt ctgcctggac ttctcagctt tgccatcact gctggacgtg ctgaccctc 300
caggggaggc ccggcccctc gatctcagtt cttcccgggg cccaggggcc tctttcttcc 360
gtccactcct cattgacatc gagtctttat tctgtcgtgt cttcattctt caggctgtgg 420
agaccccatt ctcctctgcc tgggcagctg aatacagaaa cttctctgct ccaccccaag 480
ttccccacag ctgtggtctg ggaagcagga tctccaagtt tccagtgtgg gcacctggaa 540
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<213> Homo sapiens
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Pro Ala Val Pro Ser Tyr Gln Gln Phe Gln Val Pro Thr Leu Glu Thr
Trp Arg Ser Cys Phe Pro Asp His Ser Cys Gly Glu Leu Gly Val Glu
                             40
Gln Arg Ser Phe Cys Ile Gln Leu Pro Arg Gln Arg Arg Met Gly Ser
                         55
Pro Gln Pro Glu Glu Arg His Asp Arg Ile Lys Thr Arg Cys Gln Gly
65
                    70
Val Asp Gly Arg Lys Arg Pro Leu Gly Pro Gly Lys Asn Asp Arg Gly
                                     90
Ala Gly Pro Pro Leu Glu Gly Ser Ala Arg Pro Ala Val Met Ala Lys
                                 105
                                                     110
Leu Arg Ser Pro Gly Arg Gln Pro Arg Arg Pro Glu Arg Lys Pro Pro
        115
                             120
                                                 125
Pro Gln Arg Ser Thr Ser Arg Val Gly Val Arg Arg Ser Gln Arg Val
                        135
Lys Val Arg Arg Pro Met His Gln Lys Arg Pro Lys Leu Ser Arg Asn
                    150
                                         155
Ser Leu Gly His Ser Leu Pro Pro Ile Trp Ile Ala Trp Thr Gly Gly
                165
                                     170
Ala Leu Met Met Ala Ala Ala Thr Leu Gly Ile Ser Thr Arg Thr
            180
                                 185
                                                     190
Thr Glu Ala Arg Pro Pro Gly Ser
        195
                             200
<210> 17
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tgtattccag aactcggcga tgtaccaggt cacggagtag ttctcctcgc accagtccag 180
cgtggaggtc gtggggcccc agtagccctc tcggtccgcg gccggagcca tcacqccqcc 240
gccgccgccg cccaggcgct ccgcgtcgac gcggccgcga attc
                                                                   284
<210> 18
<211> 92
<212> PRT
<213> Homo sapiens
<400> 18
Ile Arg Gly Arg Val Asp Ala Glu Arg Leu Gly Gly Gly Gly Gly Gly
                                     10
Val Met Ala Pro Ala Ala Asp Arg Glu Gly Tyr Trp Gly Pro Thr Thr
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'30

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Ser Thr Leu Asp Trp Cys Glu Glu Asn Tyr Ser Val Thr Trp Tyr Ile
 Ala Glu Phe Trp Asn Thr Val Ser Asn Leu Ile Met Ile Ile Pro Pro
                          55
 Met Phe Gly Ala Ile Gln Ser Val Arg Asp Gly Leu Glu Lys Arg Tyr
                     70
                                          75
 Ile Ala Ser Tyr Leu Ala Leu Thr Val Val Gly Met
                 85
                                      90
 <210> 19
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 <213> Homo sapiens
 <220>
 <221> unsure
 <222> (634)...(919)
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 cactgtgact gtgtccattc attggcttag gtatagtctg gcttttaaga agatgtaaaa 180
 gcaaactatt gttagcagct tgttttatat tgtttctttc cagtgagttc ttataacctg 240
 catttttagg ggaagaagga atgataccca ttggattttg aaacactgta gcactacttt 300
 tgctagccat cagtttgctt gatgatgttc ttgcctgacc attaagatgg cttgacattc 360
cttttgggag ctggtaactg ccaacatect tetggecatt ttettgeaat etggecatag 420
 cagcaagtct ttcacttgct gcttgatttg cattttgcgt ttttaaagcg tgttctcgag 480
 aatactgctg caaatgggct tcgcttgaca gaagtaatgc taactggcta caagcaacac 540
 taggtttaag tgaggtggca ggactagccc ttttttccac catgcttgca acagcctgta 600
 atcttgcagc acatgacaac gggtcactca tganctttgg tccactttgt ccacatgatg 660
 angagactet geaacetate tetgatgang gttttagten cateaggaan attegaatea 720
 ngcttttgac cttaacttta cttttctttc accaaagntt ttaagtggac tggagccaca 780
 centageace ttaaaacett etenettttt aaagaatetg getggaggee taateettgn 840
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 ttaaggactg gaacccaana aggcccct
                                                                    928
 <210> 20
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 <222> (3)...(93)
 <223> Xaa = any amino acid
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Pro Pro Ala Arg Phe Phe Lys Lys Xaa Glu Gly Phe Lys Val Leu Xaa
Cys Gly Ser Ser Pro Leu Lys Xaa Phe Gly Glu Arg Lys Val Lys Leu
Arg Ser Lys Ala Phe Glu Xaa Ser Xaa Asp Asn Xaa His Gln Arg Val
                     70
Ala Glu Ser Xaa His His Val Asp Lys Val Asp Gln Xaa Ser Val Thr
                 85
                                     90
Arg Cys His Val Leu Gln Asp Tyr Arg Leu Leu Gln Ala Trp Trp Lys
            100
                                 105
Lys Gly Leu Val Leu Pro Pro His Leu Asn Leu Val Leu Val Ala
        115
                             120
Ser His Tyr Phe Cys Gln Ala Lys Pro Ile Cys Ser Ser Ile Leu Glu
                         135
                                             140
Asn Thr Leu Lys Arg Lys Met Gln Ile Lys Gln Gln Val Lys Asp Leu
                     150
                                         155
Leu Leu Trp Pro Asp Cys Lys Lys Met Ala Arg Arg Met Leu Ala Val
                165
                                     170
Thr Ser Ser Gln Lys Glu Cys Gln Ala Ile Leu Met Val Arg Gln Glu
                                 185
                                                     190
His His Gln Ala Asn Trp Leu Ala Lys Val Val Leu Gln Cys Phe Lys
        195
                             200
Ile Gln Trp Val Ser Phe Leu Leu Pro Leu Lys Met Gln Val Ile Arg
                        215
                                             220
Thr His Trp Lys Glu Thr Ile Asn Lys Leu Thr Ile Val Cys Phe
                    230
                                         235
Tyr Ile Phe Leu Lys Ala Arg Leu Tyr Leu Ser Gln Met Asp Thr Val
                245
                                    250
Thr Val Arg Glu Glu Ala Phe Leu Arg Lys Val Val His Leu Gln Leu
                                265
                                                     270
Leu Met Asn Ile Gln Ile Thr Ile Leu Val Leu Gln Met Thr Ala Val
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Val Met Lys Val Leu Ile Pro Thr Gly Ser
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                        295
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<210> 21 <211> 563 <212> DNA

<213> Homo sapiens

<400> 21

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aacaaatatg tottgtatac cacagotott tagttottot gtatottttt ggacatttot 360
 tctaacatct ttaaatttac aacctggaag agcacataaa ccgagaaact gagaacaatt 420
 cactcgtgac aaagatagcc atgatatatg aattggagtc tgttcatctt caataggctc 480
 ttcatctgat gagtcaaact cacttgtttg tattgaactg ggcggcttca tcgctggccc 540
 gccgtcgacg cggccgcgaa ttc
                                                                   563
 <210> 22
 <211> 187
 <212> PRT
 <213> Homo sapiens
 <400> 22
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Ile Gln Thr Ser Glu Phe Asp Ser Ser Asp Glu Glu Pro Ile Glu Asp
                                 25
Glu Gln Thr Pro Ile His Ile Ser Trp Leu Ser Leu Ser Arg Val Asn
        35
Cys Ser Gln Phe Leu Gly Leu Cys Ala Leu Pro Gly Cys Lys Phe Lys
                        55
Asp Val Arg Arg Asn Val Gln Lys Asp Thr Glu Glu Leu Lys Ser Cys
                    70
                                        75
Gly Ile Gln Asp Ile Phe Val Phe Cys Thr Arg Gly Glu Leu Ser Lys
                                    90
Tyr Arg Val Pro Asn Leu Leu Asp Leu Tyr Gln Gln Cys Gly Ile Ile
            100
                                105
                                                    110
Thr His His Pro Ile Ala Asp Gly Gly Thr Pro Asp Ile Ala Ser
                            120
                                                125
Cys Cys Glu Ile Met Glu Glu Leu Thr Thr Cys Leu Lys Asn Tyr Arg
    130
                        135
                                            140
Lys Thr Leu Ile His Cys Tyr Gly Gly Leu Gly Arg Ser Cys Leu Val
                    150
                                        155
                                                            160
Ala Ala Cys Leu Leu Tyr Leu Ser Asp Thr Ile Ser Pro Glu Gln
                165
                                                        175
Ala Ile Asp Ser Leu Arg Asp Leu Arg Gly Ser
            180
                                185
<210> 23
<211> 171
<212> DNA
<213> Homo sapiens
<400> 23
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ttttcatgta tatggatgtg actattttaa caaataaaag aagtgaaaag ttaaaaaaaa 120
aaaaaaaaa agtcgacgcg gccgcgaatt c
                                                                  171
<210> 24
<211> 53
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<212> PRT
 <213> Homo sapiens
 <400> 24
 Glu Phe Ala Ala Ser Thr Phe Phe Phe Phe Phe Phe Phe Phe
                                     10
 Phe Phe Phe Leu Thr Phe His Phe Phe Tyr Leu Leu Lys Ser His Pro
                                 25
 Tyr Thr Lys Asp Leu Thr Ile Met His Ser Leu Ile Val Ala Leu Ala
 Ile Ser Trp His Pro
     50
<210> 25
<211> 678
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (582)...(602)
<223> n = A, C, G or T
<400> 25
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gaacaatgtt ggcaggatca ctatctgcaa actctgggac aggcacactg ataaattcaa 120
cttcttcttc ttcaaagatt ttaatatttt cttcaattgt ctggtagaga gcagctgggg 180
catctgcaga gggctcattt aagatgacat catctttgat gtactttatt ccacagtagt 240
acacgtcatc tggttgaagt gcaaaatatt tgtacaagta tgctcctcct agaataacac 300
ctgcaagcat aaatgctagt ccaaagcaca tgcaccaaca ccaggctctt ctttggccaa 360
ctggtaccac atcatctggg tccttgcagt ccaccgcgac ggcgtcgggg gggatgatga 420
gegeeteete geegetettg ggetegteet tettggeete ettetgggee agageggagt 480
tgaacgtcac cttcaccatg gegeggeetg ggggeecete gaagggegge ggeggetegg 540
ggcgcggctg cggctcccgg ctgcgattgc agcctctacg gncgggctcc gggagccggc 600
tncgggcggc tgaagaaggt cgggaagctt cgcggcggca gaagcggcta ctgcgggtcg 660
acgccggccg cgaaattc
                                                                   678
<210> 26
<211> 219
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (26)...(33)
<223> Xaa = any amino acid
Glu Phe Arg Gly Arg Arg Pro Ala Val Ala Ala Ser Ala Ala Ala
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10
 Lys Leu Pro Asp Leu Leu Gln Pro Pro Xaa Ala Gly Ser Arg Ser Pro
                                 25
 Xaa Val Glu Ala Ala Ile Ala Ala Gly Ser Arg Ser Arg Ala Pro Ser
 Arg Arg Arg Pro Ser Arg Ala Pro Gln Ala Ala Pro Trp Arg Arg Ser
 Thr Pro Leu Trp Pro Arg Arg Pro Arg Arg Thr Ser Pro Arg Ala
 Ala Arg Arg Ser Ser Ser Pro Pro Thr Pro Ser Arg Trp Thr Ala
                                     90
 Arg Thr Gln Met Met Trp Tyr Gln Leu Ala Lys Glu Glu Pro Gly Val
             100
Gly Ala Cys Ala Leu Asp His Leu Cys Leu Gln Val Leu Phe Glu Glu
                             120
His Thr Cys Thr Asn Ile Leu His Phe Asn Gln Met Thr Cys Thr Thr
                         135
Val Glu Ser Thr Ser Lys Met Met Ser Ser Met Ser Pro Leu Gln Met
                     150
                                         155
Pro Gln Leu Leu Ser Thr Arg Gln Leu Lys Lys Ile Leu Lys Ser Leu
                 165
                                     170
                                                         175
Lys Lys Lys Leu Asn Leu Ser Val Cys Leu Ser Gln Ser Leu Gln
            180
                                 185
                                                     190
Ile Val Ile Leu Pro Thr Leu Phe Met Thr Leu Thr Arg Asn Leu Gln
        195
                             200
Pro Ile Ile Leu Thr Trp Ile Ser Ala Gly Ser
    210
                         215
<210> 27
<211> 916
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (613)...(915)
<223> n = A, C, G or T
<400> 27
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catgagatta gacattgaga tggtcccttt atattgagag aacatggact ttggagttgg 120
gcagacttga atttgcattc tggctctagt ggttactacc tagtgtggct ttgagctatt 180
aaactttcca aagtttcgaa ggacttatct gtaacatagt aatggtaatc caccttatgg 240
ggtagttgtc ttgaagaggc tatttgggag gctgaggcaa gaggatcact tgaggccagg 300
aggttgaaac cagcctgggc aacacagcga gaccctgtgt ctacaaaaaa ttaaaaaatt 360
aggcattgtg gcgtgcacct gaagtcccag ctactcaagg cagagatggg aggatcactt 420
gtgcccagga gctccaggct gcagtgagcc atgattttgc cactgcactc cagactgggt 480
gacagagcaa gaccccttct ctttgttggg ggcaaaaaaa aaaaaaagag ggtatatgaa 540
gtacctagta taatatctag cctgaattgc ctataatgac gcacttcctt tctttccctt 600
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gggtttcagc tgncaaacac tcttctacaa gtaagataag cccagctttg natggtcaat 660
ggataaacat ttcctatttc tttgtaaatc ccatnttctg cagacatctc aatttcatca 720
ttggccaaaa aagtcctttc attccttanc cctgganaaa taacctttnt taaatnttaa 780
accontintge etgaactttg getateetet titaeatnie ettaaacean ggaettggaa 840
cttcttggat cantcccaag attaattcct taantttttc anaccaaccg gtatgaagca 900
gggaatangg ccttnt
<210> 28
<211> 236
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(93)
<223> Xaa = any amino acid
<400> 28
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                                     10
Asn Ser Trp Xaa Ser Lys Lys Phe Gln Val Xaa Gly Leu Arg Xaa Cys
                                 25
Xaa Arg Gly Pro Lys Phe Arg Xaa Xaa Gly Leu Xaa Phe Xaa Lys Gly
                                                 45
                            40
Tyr Xaa Ser Arg Xaa Lys Glu Lys Asp Phe Phe Gly Gln Asn Asp Val
                        55
                                             60
Cys Arg Xaa Trp Asp Leu Gln Arg Asn Arg Lys Cys Leu Ser Ile Asp
                                         75
65
                    70
His Xaa Lys Leu Gly Leu Ser Tyr Leu Lys Ser Val Xaa Gln Leu Lys
Pro Lys Gly Lys Lys Gly Ser Ala Ser Leu Ala Ile Gln Ala Arg Tyr
                                 105
Tyr Thr Arg Tyr Phe Ile Tyr Pro Leu Phe Phe Phe Ala Pro Asn
                            120
Lys Glu Lys Gly Ser Cys Ser Val Thr Gln Ser Gly Val Gln Trp Gln
                        135
Asn His Gly Ser Leu Gln Pro Gly Ala Pro Gly His Lys Ser Ser His
                    150
                                         155
Leu Cys Leu Glu Leu Gly Leu Gln Val His Ala Thr Met Pro Asn Phe
                                     170
                165
Leu Ile Phe Cys Arg His Arg Val Ser Leu Cys Cys Pro Gly Trp Phe
            180
                                 185
                                                     190
Gln Pro Pro Gly Leu Lys Ser Ser Cys Leu Ser Leu Pro Asn Ser Leu
                            200
                                                 205
Phe Lys Thr Thr Pro Gly Gly Leu Pro Leu Leu Cys Tyr Arg Val
                        215
Leu Arg Asn Phe Gly Lys Phe Asn Ser Ser Lys Pro
225
                    230
                                         235
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<210> 29
<211> 930
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (611)...(928)
<223> n = A, C, G or T
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gtacataaca aacatggcga aaaaggagat gtttgaaacc atctgcattt ttttctgtga 120
tcggtcttta agctcactgt aaattggcag gactgacggg tggcaaacaa atgcaaatgc 180
aatggtgggt aaagcataca cggtctttga attgaaggta acatattttg gcgtacacgt 240
gtcagcattt gttgaattag cacttattgt tgaatttagc tctggaacaa tgcagggaat 300
ttgaaatttc ttgtaaataa ccacaattag gaaaaaaacc atacagctca aggaaaatcc 360
actagtatag ccaagatacc ctaagttctt caagagacac agagggagaa ttatgccaaa 420
ggtaactatc accaccagaa cgcggccatc cacgtaccag gctgaaaatg tctcttcctt 480
tcccattaga aactttatgg cagagggtag ttcatttttt acgatgaaga ggtagctcag 540
cattgctcca gtgttctgta gagaggtggc ttcaaagatt acgaacttcc tgtggtgcca 600
aagacttggt nccccacttt tcatacacca tgcagnctgt tcttttgaac agatcaatag 660
ganggttaat ggaatatata gacagcaatg tcactgaagt caaaagtacc cgaaaaagtn 720
gggattccag tgtttgccag ggcaaaaggc caattcccaa aattccactt gnccataatg 780
gccttgctta aggttaaaac cgacatgccc taanggaggt tgnacctggg aatatactca 840
ttncactttt tttttccaa aggctgtttg gganantttt tttanttttc cgaccnaaat 900
                                                                   930
aaacttgnnt ttaacngacc tttttttnct
<210> 30
<211> 307
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(104)
<223> Xaa = any amino acid
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                                                         15
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Lys Lys Xaa Ser Gln Thr Ala Phe Gly Lys Lys Lys Val Xaa Val Tyr
                                 25
Ser Gln Val Gln Pro Pro Leu Gly His Val Gly Phe Asn Leu Lys Gln
                                                 45
                             40
Gly His Tyr Gly Gln Val Glu Phe Trp Glu Leu Ala Phe Cys Pro Gly
                        55
Lys His Trp Asn Pro Xaa Phe Phe Gly Tyr Phe Leu Gln His Cys Cys
                                         75
                    70
Leu Tyr Ile Pro Leu Thr Xaa Leu Leu Ile Cys Ser Lys Glu Gln Xaa
```

```
90
                85
Ala Trp Cys Met Lys Ser Gly Xaa Pro Ser Leu Trp His His Arg Lys
                                                     110
                                 105
Phe Val Ile Phe Glu Ala Thr Ser Leu Gln Asn Thr Gly Ala Met Leu
                                                 125
                             120
Ser Tyr Leu Phe Ile Val Lys Asn Glu Leu Pro Ser Ala Ile Lys Phe
                                             140
                        135
Leu Met Gly Lys Glu Glu Thr Phe Ser Ala Trp Tyr Val Asp Gly Arg
                                         155
                    150
Val Leu Val Val Ile Val Thr Phe Gly Ile Ile Leu Pro Leu Cys Leu
                                                         175
                                     170
                165
Leu Lys Asn Leu Gly Tyr Leu Gly Tyr Thr Ser Gly Phe Ser Leu Ser
                                 185
            180
Cys Met Val Phe Phe Leu Ile Val Val Ile Tyr Lys Lys Phe Gln Ile
                                                 205
                             200
Pro Cys Ile Val Pro Glu Leu Asn Ser Thr Ile Ser Ala Asn Ser Thr
    210
                        215
                                             220
Asn Ala Asp Thr Cys Thr Pro Lys Tyr Val Thr Phe Asn Ser Lys Thr
                                         235
                    230
Val Tyr Ala Leu Pro Thr Ile Ala Phe Ala Phe Val Cys His Pro Ser
                                     250
                245
Val Leu Pro Ile Tyr Ser Glu Leu Lys Asp Arg Ser Gln Lys Lys Met
                                                     270
                                 265
            260
Gln Met Val Ser Asn Ile Ser Phe Phe Ala Met Phe Val Met Tyr Phe
                                                 285
                             280
Leu Thr Ala Ile Phe Gly Tyr Leu Thr Phe Tyr Asp Asn Val Gln Ser
                         295
                                             .300
    290
Asp Gly Ser
305
<210> 31
<211> 919
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (610)...(918)
<223> n = A, C, G or T
<400> 31
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acagggcctg atgggaggca gaggatagaa cagactgtac agtgggaata aagatcatac 120
ctatttacaa ggaagtagaa aagacatggt aatggatatc aaattgagtg tgaaacctgg 180
gaaaggacag aaaactcctc ccttttgcct gacctccttt ttactcccct accttggcct 240
gtgctatcct gagacactcc tcaattgctc aattaattct ccaggaaagg caaacctata 300
gtcaatagtt agcttggcaa gaatataggt taataattag agttggagga agctaacagt 360
ggagatagga cttgagtagc tgccactggt agttttatct ataacctctc ctcgaacctc 420
gcattaacct cagatttcat tgaattaaaa agaaggtggg agggcaagta aatcaatcaa 480
```

```
aacttccata aaacaaqtac cccaactqaa ctaccatcaa ttaaagtgca aactgcaggg 540
gtatatgggt ggctggggct gaggccatct aaaggccaga ggggaaaaaa tgcatatgta 600
taaatcagan qatgggtacc agaactgncc cttccttcaa tcagatcaca gcagagccca 660
agatgcaggc aaccagtgga aaatcnttgg gaagactctg gggtccaacc ccacgattag 720
gggaaaccct tccttaaaaa ggttgcntga aggggaaact gggccctttg aaaaagttac 780
nggaaccena gtggneettg acetteacet teggeeatta nettacaagg gaeetteetg 840
enggggeetg aaaattgeet ecceatttta netttaeeta ggaaceeett eenaggneaa 900
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<210> 32
<211> 290
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(100)
<223> Xaa = any amino acid
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Lys Trp Gly Gly Asn Phe Gln Ala Pro Ala Gly Arg Ser Leu Val Xaa
                                25
Trp Pro Lys Val Lys Val His Xaa Gly Ser Xaa Asn Phe Phe
        35
                            40
Lys Gly Pro Ser Phe Pro Phe Xaa Gln Pro Phe Gly Arg Val Ser Pro
                        55
Asn Arg Gly Val Gly Pro Gln Ser Leu Pro Xaa Asp Phe Pro Leu Val
                                        75
                    70
Ala Cys Ile Leu Gly Ser Ala Val Ile Leu Lys Glu Gly Xaa Val Leu
                                    90
Val Pro Ile Xaa Phe Ile His Met His Phe Pro Ser Gly Leu Met
                                105
            100
Ala Ser Ala Pro Ala Thr His Ile Pro Leu Gln Phe Ala Leu Leu Met
                            120
                                                125
Val Val Gln Leu Gly Tyr Leu Phe Tyr Gly Ser Phe Asp Phe Thr Cys
                                            140
                        135
Pro Pro Thr Phe Phe Leu Ile Gln Asn Leu Arg Leu Met Arg Gly Ser
                    150
                                        155
Arg Arg Gly Tyr Arg Asn Tyr Gln Trp Gln Leu Leu Lys Ser Tyr Leu
                165
                                    170
His Cys Leu Pro Pro Thr Leu Ile Ile Asn Leu Tyr Ser Cys Gln Ala
                                                    190
                                185
Asn Tyr Leu Val Cys Leu Ser Trp Arg Ile Asn Ala Ile Glu Glu Cys
                            200
Leu Arg Ile Ala Gln Ala Lys Val Gly Glu Lys Gly Gln Ala Lys
                        215
                                            220
Gly Arg Ser Phe Leu Ser Phe Pro Arg Phe His Thr Gln Phe Asp Ile
                                                             240
                    230
                                        235
```

```
His Tyr His Val Phe Ser Thr Ser Leu Ile Gly Met Ile Phe Ile Pro
                                     250
                245
Thr Val Gln Ser Val Leu Ser Ser Ala Ser His Gln Ala Leu Phe Leu
                                 265
Cys Ser Phe Val Asn Ile Leu Asn Leu Val Pro Pro Ser Leu Ile Pro
                                                 285
                             280
        275
Gly Ser
    290
<210> 33
<211> 916
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (596)...(915)
\langle 223 \rangle n = A, C, G or T
<400> 33
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ctccccacgg cacagcattt cgtacttctg tctctctggc aggtaatcca cagcaacccc 120
ttttttcttt ggtgtagttt tctgatcaga ttggtcatct gaagcagact tattgacatc 180
tttttcttta gccattatat actcaaaata ttttaagtta ccattagctc tctgatgttc 240
aggatctagt tcaagaagct tctttgtgag caaaagtgcc ttatccaggt ctccctgctg 300
atataccgca tagctcaaat aatctagaac agagacttta tctatggtag aaatctcgcc 360
ttcatccagt tgccttaggg cttgttccat ccacagttcc gtatggtaat aatctgcttc 420
tgtataggcc actttgccca actcaaagca gtcctcagcc cgttagaaaa gatttgtgtt 480
tcactcctqq aagattaccc tttgagatgg tatctgtatc caaattgtag gtatcctgga 540
gacgtaacag agctttggct gccccaacct gatcttcatc attaggaaag tactgnctct 600
gaatgggtan ggtagagata aagccatctg acatatcctt aaggaccaga ttctccaact 660
cacttcactc agtattcaga cgttcattaa atttgaatgc atttactggg tggcccaaca 720
aatccttctg gaacntttgn cgctggacta agttacccga tctaacntct ntgcccattt 780
tttaantggn ctacctgggc ctntntggcc ttaannnanc tttcnaaaag cccnnaactt 840
tncaagnntg ggcnaannng ncntttgccn ntgannnaaa aacntggang nccccaanct 900
gggaaccnaa ttnnnt
<210> 34
<211> 299
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(103)
<223> Xaa = any amino acid
<400> 34
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Xaa Asn Xaa Val Pro Xaa Leu Gly Xaa Ser Xaa Phe Xaa Xaa Xaa

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10
Gln Xaa Xaa Xaa Xaa Pro Xaa Leu Xaa Lys Xaa Xaa Ala Phe Xaa Lys
                                 25
Xaa Xaa Gly Xaa Xaa Gly Pro Gly Xaa Pro Xaa Lys Lys Trp Ala Xaa
Xaa Leu Asp Arg Val Thr Ser Ser Xaa Lys Xaa Ser Arg Arg Ile Cys
Trp Ala Thr Gln Met His Ser Asn Leu Met Asn Val Ile Leu Ser Glu
Val Ser Trp Arg Ile Trp Ser Leu Arg Ile Cys Gln Met Ala Leu Ser
                                     90
Leu Pro Tyr Pro Phe Arg Xaa Ser Thr Phe Leu Met Met Lys Ile Arg
                                105
                                                     110
Leu Gly Gln Pro Lys Leu Cys Tyr Val Ser Arg Ile Pro Thr Ile Trp
        115
                            120
Ile Gln Ile Pro Ser Gln Arg Val Ile Phe Gln Glu Asn Thr Asn Leu
                        135
Phe Arg Ala Glu Asp Cys Phe Glu Leu Gly Lys Val Ala Tyr Thr Glu
                    150
                                         155
Ala Asp Tyr Tyr His Thr Glu Leu Trp Met Glu Gln Ala Leu Arg Gln
                165
                                    170
Leu Asp Glu Gly Glu Ile Ser Thr Ile Asp Lys Val Ser Val Leu Asp
            180
Tyr Leu Ser Tyr Ala Val Tyr Gln Gly Asp Leu Asp Lys Ala Leu
                            200
Leu Leu Thr Lys Lys Leu Leu Glu Leu Asp Pro Glu His Gln Arg Ala
                        215
Asn Gly Asn Leu Lys Tyr Phe Glu Tyr Ile Met Ala Lys Glu Lys Asp
                    230
                                        235
Val Asn Lys Ser Ala Ser Asp Asp Gln Ser Asp Gln Lys Thr Thr Pro
                245
                                    250
Lys Lys Gly Val Ala Val Asp Tyr Leu Pro Glu Arg Gln Lys Tyr
                                265
Glu Met Leu Cys Arg Gly Glu Gly Ile Lys Met Thr Pro Arg Arg Gln
                            280
                                                285
Lys Lys Leu Phe Cys Arg Tyr His Gly Gly Ser
    290
                        295
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<210> 35

<211> 916

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (596)...(915)

<223> n = A, C, G or T
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<400> 35

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 tttttttttt ggtgtagttt tctgatcaga ttggtcatct gaagcagact tattgacatc 180
 tttttcttta gccattatat actcaaaata ttttaagtta ccattagctc tctgatgttc 240
 aggatctagt tcaagaagct tctttgtgag caaaagtgcc ttatccaggt ctccctgctg 300
 atataccgca tagctcaaat aatctagaac agagacttta tctatggtag aaatctcgcc 360
 ttcatccagt tgccttaggg cttgttccat ccacagttcc gtatggtaat aatctgcttc 420
 tgtataggcc actttgccca actcaaagca gtcctcagcc cgttagaaaa gatttgtgtt 480
 tcactcctgg aagattaccc tttgagatgg tatctgtatc caaattgtag gtatcctgga 540
gacgtaacag agctttggct gccccaacct gatcttcatc attaggaaag tactgnctct 600
gaatgggtan ggtagagata aagccatctg acatatcctt aaggaccaga ttctccaact 660
cacttcactc agtattcaga cgttcattaa atttgaatgc atttactggg tggcccaaca 720
aatcettetg gaacntttgn egetggacta agttaceega tetaaentet nigeeeattt 780
tttaantggn ctacctgggc ctntntggcc ttaannnanc tttcnaaaag cccnnaactt 840
tncaagnntg ggcnaannng ncntttgccn ntgannnaaa aacntggang nccccaanct 900
gggaaccnaa ttnnnt
<210> 36
<211> 106
<212> PRT
<213> Homo sapiens
<400> 36
Asn Ser Arg Pro Arg Pro Gly Trp Leu Arg Gly Ala Ala Pro Gly
                                     10
Pro Arg Gly Ser Gln Ser Asn Glu Thr Thr Ala Cys Ser Arg Leu Val
                                 25
Glu Ile Ser Arg Arg His Gln Trp Ala Arg Ser Glu Pro Ser Gly Pro
                             40
Pro Val Trp Asn Gln Thr Cys Ala Arg Gly Arg Ala Val Gly Gln Arg
                        55
Gly Arg Gly Asp Glu Gly Ala Met Ala Arg Lys Leu Ser Val Ile Leu
                    70
                                         75
Ile Leu Thr Phe Ala Leu Ser Val Thr Asn Pro Leu His Glu Leu Lys
Ala Ala Ala Phe Pro Gln Thr Thr Gly Ser
            100
                                 105
<210> 37
<211> 626
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (586)...(586)
<223> n = A, C, G or T
<400> 37
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ggatccacca accccggcct cccaaagtgc tgggattaca ggcatgagcc accacgccca 60
gccattcctt gtcatttcta tcatttgata catctatact tctgaataat cataactgat 120
actcaaagag atgccctgac accetecaag gttetacaag gtgaccaaat cagagaggte 180
acctcatgcc tagtattatt ttggggttag catacatttt ataataatta ttttaaaact 240
ggcaatccat tttgggactc aatgacagct ctctctatta atcatattgt tttattaact 300
gaaatagtcc actcagtcag taggattaat gatcagagat tatgacacaa ctaaaaccaa 360
agctggggca atgggctctc agaatggaac cacccattat gaactatcca tctgaccaac 420
tctttaactt tcttcctaaa tatgagatca ccaaggcgtt tcaatgcagc ctgcacaatt 480
catggggcag ggtcctcaga ttaaagactt tacatttatg tagaattcaa gtatcatttt 540
tcactaagca aactctattt gctcactctc ttctacatgt aattgnccaa ctttggttga 600
ctgctgagtc ctcatgggaa gaattc
<210> 38
<211> 188
<212> PRT
<213> Homo sapiens
<400> 38
Ile Leu Pro Met Arg Thr Gln Gln Ser Thr Lys Val Gly Gln Leu His
 1
                                     10
Val Glu Glu Ser Glu Gln Ile Glu Phe Ala Lys Met Ile Leu Glu Phe
                                 25
Tyr Ile Asn Val Lys Ser Leu Ile Gly Pro Cys Pro Met Asn Cys Ala
                             40
Gly Cys Ile Glu Thr Pro Trp Ser His Ile Glu Glu Ser Arg Val Gly
                        55
Gln Met Asp Ser Ser Trp Val Val Pro Phe Glu Pro Ile Ala Pro Ala
65 -
                 - 70
                           2 .
                                         75
Leu Val Leu Val Val Ser Ser Leu Ile Ile Asn Pro Thr Asp Val Asp
                85
                                     90
Tyr Phe Ser Asn Asn Met Ile Asn Arg Glu Ser Cys His Val Pro Lys
                                105
Trp Ile Ala Ser Phe Lys Ile Ile Ile Lys Cys Met Leu Thr Pro
        115
                            120
Lys Tyr Ala Gly Asp Leu Ser Asp Leu Val Thr Leu Asn Leu Gly Gly
                        135
Cys Gln Gly Ile Ser Leu Ser Ile Ser Tyr Asp Tyr Ser Glu Val Met
                    150
                                        155
Tyr Gln Met Ile Glu Met Thr Arg Asn Gly Trp Ala Trp Trp Leu Met
                165
                                    170
                                                         175
Pro Val Ile Pro Ala Leu Trp Glu Ala Gly Val Gly
            180
                                185
<210> 39
<211> 897
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<212> DNA

<213> Homo sapiens

```
<221> unsure
<222> (634)...(896)
\langle 223 \rangle n = A, C, G or T
<400> 39
ggatcctgag ctaagcatgg tccctccgta gatatccaga gccagctgag aataggcaaa 60
gccaaaaaca gtgatggtca ggccggccag cagggccagc ttgagcaggg actccaagac 120
tgcagcagcc acagcaacgt cctcctgctt ctgaagtgtg gcatcctttc ccctctccag 180
caccttagca aaaaatatat aaaaactttc ctctattggc tggaaaatta atctggccac 240
aagggagcca agattattca ctatatcata cacaccctga tcaccaaagt tcaatacatt 300
caaaaatgtc atcacatatc gctcgccttc tgtcaaaatc tgtttcaaga aagactgttt 360
gaaaaaactc caagtcagtt tagcctcttt ccagtttata aacgctccat ttcttgtaat 420
attgggtaac agatctgtta ttctggagac aggaagagtt tgaagcttgg ttgattctgg 480
ggaacccagt aactttgtga aataaataac atagcagagc accagaactg tggtatagaa 540
aagctgggcc aaagagaaaa tgtacaatcc ccagtgaggc aaccacagca cgagaaaagc 600
tgtcagacgc tcttaagaat taccgcaggc tctntgcaat caccttgagc ttncaaacat 660
atgtgcttgt gcccaagaac caaaaggctn ttctanaagc ttcaccactg gcgaaagacc 720
aaccgnacca ntccagttgc atantgaggg acaccattag gatcngcctt tnagcagttn 780
aaccagaten geecaggaat anggeecaae tteecagggg actgttaeec ancaggttaa 840
gggctggtcc agctncctgg ggccccctgg anatgtttgn gaaggccttt ggccnnt
<210> 40
<211> 296
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(86)
<223> Xaa = any amino acid
<400> 40
Xaa Gly Gln Arg Pro Ser Gln Thr Xaa Pro Gly Gly Pro Arg Xaa Leu
                                     10
Asp Gln Pro Leu Thr Xaa Trp Val Thr Val Pro Trp Glu Val Gly Pro
                                                     30
                                 25
Tyr Ser Trp Ala Asp Leu Val Xaa Leu Leu Lys Gly Xaa Ser Trp Cys
                             40
Pro Ser Xaa Cys Asn Trp Xaa Gly Xaa Val Gly Leu Ser Pro Val Val
                                             60
                         55
Lys Leu Xaa Glu Xaa Pro Phe Gly Ser Trp Ala Gln Ala His Met Phe
                                         75
65
Xaa Ser Ser Arg Leu Xaa Arg Ala Cys Gly Asn Ser Glu Arg Leu Thr
                                     90
                85
Ala Phe Leu Val Leu Trp Leu Pro His Trp Gly Leu Tyr Ile Phe Ser
                                                     110
                                 105
            100
Leu Ala Gln Leu Phe Tyr Thr Thr Val Leu Val Leu Cys Tyr Val Ile
                                                 125
                             120
Tyr Phe Thr Lys Leu Leu Gly Ser Pro Glu Ser Thr Lys Leu Gln Thr
                         135
    130
```

```
Leu Pro Val Ser Arg Ile Thr Asp Leu Leu Pro Asn Ile Thr Arg Asn
145
                     150
                                         155
Gly Ala Phe Ile Asn Trp Lys Glu Ala Lys Leu Thr Trp Ser Phe Phe
                                     170
Lys Gln Ser Phe Leu Lys Gln Ile Leu Thr Glu Gly Glu Arg Tyr Val
            180
                                 185
Met Thr Phe Leu Asn Val Leu Asn Phe Gly Asp Gln Gly Val Tyr Asp
        195
                             200
                                                 205
Ile Val Asn Asn Leu Gly Ser Leu Val Ala Arg Leu Ile Phe Gln Pro
                         215
                                             220
Ile Glu Glu Ser Phe Tyr Ile Phe Phe Ala Lys Val Leu Glu Arg Gly
225
                    230
                                         235
Lys Asp Ala Thr Leu Gln Lys Gln Glu Asp Val Ala Val Ala Ala Ala
                                     250
Val Leu Glu Ser Leu Leu Lys Leu Ala Leu Leu Ala Gly Leu Thr Ile
                                 265
            260
Thr Val Phe Gly Phe Ala Tyr Ser Gln Leu Ala Leu Asp Ile Tyr Gly
                             280
                                                 285
Gly Thr Met Leu Ser Ser Gly Ser
    290
                        295
<210> 41
<211> 607
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (200)...(211)
<223> n = A, C, G or T
<400> 41
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ccatggaaga gcccacatga atccaggtct actttccttt acaggtagat tccagaacaa 120
caacaaaaaa tgtaagacta caagaaatga tttaatatga taaaactccc atttcaaaac 180
ccagttctaa aggatttacn tgactaatgc ntgattattt agtcatggaa aatgtctctc 240
ataaaagtgc tcctaacaaa acatgatcta caataattta taaaatgtga agggttggga 300
tgtgcagact gattggtgca cgtcaggttg tttctcttaa ataaggtata aaaaactatg 360
atatcatagt ctttcgactt tattttctga gataaaaaag tataggcata ggtgttttta 420
atagtettet tgatgatate etttagaata atetateaaa tggettettt eatgttteet 480
gattatcagc attcatcagt gttactgtca gccttgatta agtggttgaa aatttcagag 540
aagaataagc aacttctgtg aacctttccc caatccctga gaatcatgtc gacgcggccg 600
cgaattc
                                                                   607
<210> 42
<211> 189
<212> PRT
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<213> Homo sapiens

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<220>
<221> UNSURE
<222> (121)...(125)
<223> Xaa = any amino acid
<400> 42
Asn Ser Arg Pro Arg Arg His Asp Ser Gln Gly Leu Gly Lys Gly Ser
                                     10
Gln Lys Leu Ile Leu Leu Asn Phe Gln Pro Leu Asn Gln Gly Gln
            20
                                 25
His Met Leu Ile Ile Arg Lys His Glu Arg Ser His Leu Ile Asp Tyr
                             40
Ser Lys Gly Tyr His Gln Glu Asp Tyr Lys His Leu Cys Leu Tyr Phe
Phe Ile Ser Glu Asn Lys Val Glu Arg Leu Tyr His Ser Phe Leu Tyr
Leu Ile Glu Lys Gln Pro Asp Val His Gln Ser Val Cys Thr Ser Gln
Pro Phe Thr Phe Tyr Lys Leu Leu Ile Met Phe Cys Glu His Phe Tyr
                                 105
                                                     110
Glu Arg His Phe Pro Leu Asn Asn Xaa Ala Leu Val Xaa Ile Leu Asn
                             120
Trp Val Leu Lys Trp Glu Phe Tyr His Ile Lys Ser Phe Leu Val Val
                         135
                                             140
Leu His Phe Leu Leu Phe Trp Asn Leu Pro Val Lys Glu Ser Arg
                    150
                                         155
Pro Gly Phe Met Trp Ala Leu Pro Trp Leu Lys Cys Cys Pro Arg Asp
                165
                                     170
                                                         175
Phe Val Gly Asn Asp Phe Phe Phe Ser Gly His Gly Ser
            180
                                 185
<210> 43
<211> 466 ·
<212> DNA
<213> Homo sapiens
<400> 43
ggatccttta atgtcctcat ttgttgtctg gttggagctg atcaagtagg tgtggaatcc 60
tgagaggcca acgatggacc agacagagaa gaagcacacc acagcctcca ggacgcttgc 120
aggactgtcc ttaagggcat ttaggaatcc tgtttgctgt gaacgaagaa tgacgtgggt 180
gataacgaat gcaaatataa agactgtcag aaaagacaga gataaaataa acatataaaa 240
aaatctgtag tttcttttcc ccacacagtt gcctacccag ggacagtggt gatcaaaccg 300
ttctacgcag ttatcacaaa ggctgcaatg ggaggcgca gggggccgga aaatcttgca 360
ggtgaaacag tatttaagtt tcacggtctg gccattgatg atgacttctt tggttctggg 420
aggcgggcgg taccccctg aactgggtcg acgcggccgc gaattc
                                                                   466
<210> 44
<211> 153
<212> PRT
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<213> Homo sapiens <400> 44 Asn Ser Arg Pro Arg Pro Ser Ser Gly Gly Tyr Arg Pro Pro Arg Thr Lys Glu Val Ile Ile Asn Gly Gln Thr Val Lys Leu Lys Tyr 25 Cys Phe Thr Cys Lys Ile Phe Arg Pro Pro Arg Ala Ser His Cys Ser Leu Cys Asp Asn Cys Val Glu Arg Phe Asp His His Cys Pro Trp Val 55 Gly Asn Cys Val Gly Lys Arg Asn Tyr Arg Phe Phe Tyr Met Phe Ile 70 75 Leu Ser Leu Ser Phe Leu Thr Val Phe Ile Phe Ala Phe Val Ile Thr 85 90 His Val Ile Leu Arg Ser Gln Gln Thr Gly Phe Leu Asn Ala Leu Lys 100 105 110 Asp Ser Pro Ala Ser Val Leu Glu Ala Val Val Cys Phe Phe Ser Val 120 125 Trp Ser Ile Val Gly Leu Ser Gly Phe His Thr Tyr Leu Ile Ser Ser 135 140 Asn Gln Thr Thr Asn Glu Asp Ile Lys 145 150 <210> 45 <211> 395 <212> DNA <213> Homo sapiens <400> 45 ggatcctgtg acaatctgat ggccatacca ggagcaagct accaaggcgg caagacctgc 60 cacgatgaaa attatgcctc cacccatggc tatacgggcc ttcttcactt tgtcgtctcc 120 cccacagege agtgeactte atgeceateg tggecacaaa catggecagg aageecagea 180 ccagggagac caccattagg gctcgagtgg cctgcaaggc cgcggacagg gcgagcaccg 240 agtcgtacat tttgcagctc atcatccccg tgctctgcgt gacgcagtcc atccacagcc 300 ccttqtacat ggcctqggcc qtqatqatgt tgtcacccgc ataggaqctc atctgccact 360 gcgggatggc ggtgcgtcga cgcggccgcg aattc 395 <210> 46 <211> 126 <212> PRT <213> Homo sapiens <400> 46

Ile Arg Gly Arg Val Asp Ala Pro Pro Ser Arg Ser Gly Arg Ala Pro

Met Arg Val Thr Thr Ser Ser Arg Pro Arg Pro Cys Thr Arg Gly Cys 20 25 30 Gly Trp Thr Ala Ser Arg Arg Ala Arg Gly Ala Ala Lys Cys Thr Thr

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45
                            40
Arg Cys Ser Pro Cys Pro Arg Pro Cys Arg Pro Leu Glu Pro Trp Trp
                        55
Ser Pro Trp Cys Trp Ala Ser Trp Pro Cys Leu Trp Pro Arg Trp Ala
                                        75
                    70
Ser Ala Leu Arg Cys Gly Gly Asp Asp Lys Val Lys Lys Ala Arg Ile
                                    90
Ala Met Gly Gly Ile Ile Phe Ile Val Ala Gly Leu Ala Ala Leu
                                105
Val Ala Cys Ser Trp Tyr Gly His Gln Ile Val Thr Gly Ser
                            120
        115
<210> 47
<211> 597
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (7)...(594)
<223> n = A, C, G or T
<400> 47
ggateenane thennacaen nacagagate gaegnnnnet accaggtgag ceattgeggt 60
aatatggact ttattnaagt aagttactta tattactgcc ttnccataca ctatntaatn 120
ncatttqaat tactqaqaqa ctaatatqcc atqtctaaaa ctgtctcttt cataagtaat 180
tttgngcctn cngctacncg aagcnaagnc aactcttcct tttttatata ctatganatg 240
geneegangg egaggagaan getgaangne thegaactgg eageggngan acegganngn 300
acnangaage gggnnnccen ttegengeea nnntetttgg nnttateaeg gnnageeane 360
gctnnggnct gatagcgntc cgncncaccc agccggccan agtcgatgaa tccnaaaaaag 420
cggccatttt ccaccatgan attcggcaag caggcatcgc catgggtcac gacganatcc 480
tegecgnegg geatgenege ettgageetg gegaacagtt eggntggege gageeeetga 540
tgctnttcgn ccaaatcatc ctgatcgaca agaccggctt ccatccgagn acgngct
<210> 48
<211> 192
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (2)...(192)
<223> Xaa = any amino acid
<400> 48
Ser Xaa Xaa Ser Asp Gly Ser Arg Ser Cys Arg Ser Gly Phe Gly Arg
                                    10
Xaa Ala Ser Gly Ala Arg Ala Xaa Arg Thr Val Arg Gln Ala Gln Gly
                                                     30
            20
                                25
```

```
Xaa His Ala Arg Arg Gly Xaa Arg Arg Asp Pro Trp Arg Cys Leu
Leu Ala Glu Xaa His Gly Gly Lys Trp Pro Leu Phe Xaa Ile His Arg
Leu Trp Pro Ala Gly Xaa Xaa Gly Xaa Leu Ser Xaa Xaa Ser Xaa Gly
                                         75
Xaa Pro Xaa Gln Arg Xaa Trp Xaa Arg Xaa Gly Xaa Pro Leu Xaa Xaa
                 85
                                     90
Xaa Xaa Arg Xaa Xaa Arg Cys Gln Phe Xaa Xaa Xaa Gln Xaa Ser Pro
             100
                                 105
Arg Xaa Arg Xaa His Xaa Ile Val Tyr Lys Lys Gly Arg Val Xaa Xaa
                             120
                                                 125
Ala Ser Xaa Ser Xaa Arg Xaa Lys Ile Thr Tyr Glu Arg Asp Ser Phe
                         135
                                             140
Arg His Gly Ile Leu Val Ser Gln Phe Lys Xaa Xaa Xaa Ile Val Tyr
                    150
                                         155
                                                             160
Gly Lys Ala Val Ile Val Thr Tyr Xaa Asn Lys Val His Ile Thr Ala
                                     170
Met Ala His Leu Val Xaa Xaa Val Asp Leu Cys Xaa Cys Xaa Xaa
            180
                                 185
<210> 49
<211> 547
<212> DNA
<213> Homo sapiens
<2.20>
<221> unsure
<222> (191)...(538)
<223> n = A, C, G or T
<400> 49
ggatccccac aaacacacag gactccctcc ctcccacaga gaacacaaag ttgttaactg 60
aagaacaaga taaataatat gctagtccat tttactgatt ttaaagatac tgcaattttt 120
atacatttcg atgattttc aacattttgc agctgtttgg ctttgcagca cagcaattca 180
tacactatac ntgtacaaaa ttaccagcaa gactggaatg atgtattaat agaaggcacc 240
atcatgctta ttacattacc agagaacaaa aatacagtaa agacaatttt cactgtacac 300
agcttaaaga aaggaaaaaa ggggaggagg agtgtgttga gcagccagcc atccctgtac 360
tgaagagggg caggtagaaa aatcttagat atggagctac taaatctggt ctaatagtca 420
agaccatcgc atttgaagtt ctaatttta ttatttagtt cataactaaa atgatttcct 480
totggaatat acttgtagto ttgttaaggt ttatgtgtac acacgctgtc gacgcggncg 540
cgaattc
                                                                   547
<210> 50
<211> 167
<212> PRT
<213> Homo sapiens
```

<220>

```
<221> UNSURE
 <222> (107)...(107)
 <223> Xaa = any amino acid
 <400> 50
 Asn Ser Arg Pro Arg Arg Gln Arg Val Tyr Thr Thr Leu Thr Arg Leu
 Gln Val Tyr Ser Arg Arg Lys Ser Phe Leu Thr Lys Lys Leu Glu Leu
 Gln Met Arg Trp Ser Leu Leu Asp Gln Ile Leu His Ile Asp Phe Ser
                              40
 Thr Cys Pro Ser Ser Val Gln Gly Trp Leu Ala Ala Gln His Thr Pro
                         55
 Pro Pro Leu Phe Ser Phe Leu Ala Val Tyr Ser Glu Asn Cys Leu Tyr
                     70
Cys Ile Phe Val Leu Trp Cys Asn Lys His Asp Gly Ala Phe Tyr Tyr
                                     90
Ile Ile Pro Val Leu Leu Val Ile Leu Tyr Xaa Tyr Ser Val Ile Ala
                                 105
Val Leu Gln Ser Gln Thr Ala Ala Lys Cys Lys Ile Ile Glu Met Tyr
                             120
                                                  125
Lys Asn Cys Ser Ile Phe Lys Ile Ser Lys Met Asp His Ile Ile Tyr
                         135
Leu Val Leu Gln Leu Thr Thr Leu Cys Ser Leu Trp Glu Gly Ser
145
                     150
                                         155
Pro Val Cys Leu Trp Gly Ser
                 165
<210> 51
<211> 742
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (512)...(741)
\langle 223 \rangle n = A, C, G or T
<400> 51
ggatcctgag tcaagccaaa aaaaaaaaa aaaccaaaac aaaacaaaaa aaacaaataa 60
agccatgcca atctcatctt gttttctgcg caagttaggt tttgtcaaga aagggtgtaa 120
cgcaacttaa gtcatagtcc gcctagaagc atttgcggtg gacgatggag gggccggact 180
cgtcatactc ctgcttgctg atccacatct gctggaaggt ggacagcgag gccaggatgg 240
agccgccgat ccacacggag tacttgcgct caggaggagc aatgatcttg atcttcattg 300
tgctgggtgc cagggcagtg atctccttct gcatcctgtc ggcaatgcca gggtacatgg 360
tggtgccgcc agacagcact gtgttggcgt acaggtcttt gcggatgtcc acgtcacact 420
tcatgatgga gttgaaggta gtttcgtgga tgccacagga ctccatgccc aggaaggaag 480
gctggaagag tgcctcaggg cagcggaacc gntcattgcc aatggtgatg acctggccgt 540
caggcancct cgtanctctt ctncagggag gagctggaan cagccgtggc catttcttgc 600
```

```
tegaagteea gegnegaegt acenntacen thteettant geetaeeeen egattteeee 660
 gctcgntcgn nntngtccnn ancnnntccc ccnttcnttg nncgnntnct cnnnngcgcn 720
 ncncgncngn ntcnncnttn nt
 <210> 52
 <211> 243
 <212> PRT
 <213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(76)
<223> Xaa = any amino acid
<400> 52
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ala Xaa Glu Xaa Xaa Xaa Glu
                                     10
Xaa Gly Xaa Xaa Gly Xaa Xaa Arg Xaa Ser Gly Glu Ile Xaa Gly
                                 25
Ala Xaa Arg Xaa Xaa Xaa Tyr Val Xaa Ala Gly Leu Arg Ala Arg
                             40
                                                 45
Asn Gly His Gly Xaa Phe Gln Leu Leu Pro Xaa Glu Glu Xaa Arg Gly
Cys Leu Thr Ala Arg Ser Ser Pro Leu Ala Met Xaa Gly Ser Ala Ala
65
                    70
Leu Arg His Ser Ser Ser Leu Pro Ser Trp Ala Trp Ser Pro Val Ala
                85
Ser Thr Lys Leu Pro Ser Thr Pro Ser Ser Val Thr Trp Thr Ser Ala
            100
                                105
                                                    110
Lys Thr Cys Thr Pro Thr Gln Cys Cys Leu Ala Ala Pro Pro Cys Thr
       115
                            120
Leu Ala Leu Pro Thr Gly Cys Arg Arg Ser Leu Pro Trp His Pro
                        135
                                            140
Ala Gln Arg Ser Arg Ser Leu Leu Leu Ser Ala Ser Thr Pro Cys
                    150
                                        155
Gly Ser Ala Ala Pro Ser Trp Pro Arg Cys Pro Pro Ser Ser Arg Cys
                                    170
                                                        175
Gly Ser Ala Ser Arg Ser Met Thr Ser Pro Ala Pro Pro Ser Ser Thr
            180
                                185
Ala Asn Ala Ser Arg Arg Thr Met Thr Val Ala Leu His Pro Phe Leu
                            200
                                                205
Thr Lys Pro Asn Leu Arg Arg Lys Gln Asp Glu Ile Gly Met Ala Leu
                        215
                                            220
Phe Val Phe Phe Val Leu Phe Trp Phe Phe Phe Phe Trp Leu Asp
                    230
                                        235
```

Ser Gly Ser

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<211> 598
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> unsure
 <222> (214)...(597)
 <223> n = A, C, G or T
 <400> 53
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 tgaataagag ttggctgggc aaagtttgca gaaagaggag ccctgcttgt ctgcatacgt 120
 gccaggtttg caggggaagc attctgaagt gtaggccacc cctgttatgg caatgtttct 180
caccagcaca ggcttgggta ctttggtcca tacntgagaa ggctgtggtt ctccaataga 240
ggacattatt gcctcgattt agctccacac tgtggaattc ccatcctttc tctgtggtct 300
tcatccacct ggagtcatct gcattgggct ggcactggtc attctgaacg aaaaactcaa 360
agatgatgct ggagtctgga tagtagtatt cgaagttaac ggtgccagat tgcttcaggt 420
tgacggcgta catcagtgtg gctgtgcatt cgtccgtgtt ggaggcgatg tagtcgccc 480
ggggaaccca cttggacgaa gtacagttcc cggtggactc agcagcactg tcatccagct 540
ccatgntggc tgagaggctg gcanagccat gggncanntc atcccactca tcanacnc
<210> 54
<211> 193
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(124)
<223> Xaa = any amino acid
<400> 54
Xaa Xaa Met Ser Gly Met Xaa Xaa Pro Met Ala Xaa Pro Ala Ser Gln
                                     10
Pro Xaa Trp Ser Trp Met Thr Val Leu Leu Ser Pro Pro Gly Thr Val
                                 25
Leu Arg Pro Ser Gly Phe Pro Gly Ala Thr Thr Ser Pro Pro Thr Arg
Thr Asn Ala Gln Pro His Cys Thr Pro Ser Thr Ser Asn Leu Ala Pro
                                             60
Leu Thr Ser Asn Thr Thr Ile Gln Thr Pro Ala Ser Ser Leu Ser Phe
Ser Phe Arg Met Thr Ser Ala Ser Pro Met Gln Met Thr Pro Gly Gly
                85
                                     90
Arg Pro Gln Arg Lys Asp Gly Asn Ser Thr Val Trp Ser Ile Glu Ala
                                105
                                                     110
Ile Met Ser Ser Ile Gly Glu Pro Gln Pro Ser Xaa Val Trp Thr Lys
        115
                            120
Val Pro Lys Pro Val Leu Val Arg Asn Ile Ala Ile Thr Gly Val Ala
                        135
                                             140
```

```
Tyr Thr Ser Glu Cys Phe Pro Cys Lys Pro Gly Thr Tyr Ala Asp Lys
145
                    150
                                         155
Gln Gly Ser Ser Phe Cys Lys Leu Cys Pro Ala Asn Ser Tyr Ser Asn
                                     170
Lys Gly Glu Thr Ser Cys His Gln Cys Asp Pro Asp Lys Tyr Ser Val
                                 185
            180
Lys
<210> 55
<211> 657
<212> DNA
<213> Homo sapiens
<400> 55
ggatcccatq aggtagtcgg tcaggtcccg gccagccagg tccagacgca ggatggcgtg 60
ggggagggcg tagccctcgt agatgggcac cgtgtgggtg accccgtctc cagagtccat 120
gacaatgcca gtggtgcgcc cagaggcgta gagggacagc acggcctgga tggccacgta 180
catggccggg gtgttgaagg tctcaaacat aatctgagtc atcttctctc tgttggcctt 240
ggggttcagg ggggcctcgg tcagcagcac tgggtgctcc tccggggcca cgcgcagctc 300
gttgtagaag gtgtggtgcc agatcttctc catgtcgtcc cagttggtga cgatgccatg 360
ctcaatgggg tacttcaggg tcaggatgcc acgcttgctc tgggcctcgt cgcccacgta 420
ggagteette tggeecatge ceaecatgae geectggtgt etggggegee egaegatgga 480
aggaaacacg gctcggggag cgtcgtcccc agcaaaacca gctttgcaca tgccggagcc 540
attgtcaatg accagegege egatetette ttecattgeg accegeagag aaacgegege 600
cggagcggcg gaagaacaga gtgcgagagt tggcagcgtc gacgcggccg cgaattc
<210> 56
<211> 219
<212> PRT
<213> Homo sapiens
<400> 56
Glu Phe Ala Ala Ser Thr Leu Pro Thr Leu Ala Leu Cys Ser Ser
 1
                                     10
Ala Ala Pro Pro Arg Val Ser Leu Pro Val Ala Met Glu Glu Glu Ile
            20
                                25
Ala Ala Leu Val Ile Asp Asn Gly Ser Gly Met Cys Lys Ala Gly Phe
                            40
                                                 45
Ala Gly Asp Asp Ala Pro Arg Ala Val Phe Pro Ser Ile Val Gly Arg
                        55
                                             60
Pro Arg His Gln Gly Val Met Val Gly Met Gly Gln Lys Asp Ser Tyr
                    70
                                         75
                                                             80
Val Gly Asp Glu Ala Gln Ser Lys Arg Gly Ile Leu Thr Leu Lys Tyr
                                    90
Pro Ile Glu His Gly Ile Val Thr Asn Trp Asp Asp Met Glu Lys Ile
                                105
                                                     110
Trp His His Thr Phe Tyr Asn Glu Leu Arg Val Ala Pro Glu Glu His
        115
                            120
                                                 125
```

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Pro Val Leu Leu Thr Glu Ala Pro Leu Asn Pro Lys Ala Asn Arg Glu
    130
                      135
Lys Met Thr Gln Ile Met Phe Glu Thr Phe Asn Thr Pro Ala Met Tyr
145
                  150
                                     155
Val Ala Ile Gln Ala Val Leu Ser Leu Tyr Ala Ser Gly Arg Thr Thr
               165
                                 170
Gly Ile Val Met Asp Ser Gly Asp Gly Val Thr His Thr Val Pro Ile
           180
                             185
                                                190
Tyr Glu Gly Tyr Ala Leu Pro His Ala Ile Leu Arg Leu Asp Leu Ala
       195
                          200
Gly Arg Asp Leu Thr Asp Tyr Leu Met Gly Ser
    210
                      215
<210> 57
<211> 237
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (211)...(232)
<223> n = A, C, G or T
<400> 57
ggatcccacc ttcaacacct tacaagtaaa gacaatgaag aacagttgaa acatgcaaaa 60
tatggagctt ttcatgtaat tactctttta ctgtttacca ttcactataa ttcacaatta 120
aaaaaaaaa aaaaaaaaa aaaaaaaggg ngganaggnc gacncggccg cnaattc
<210> 58
<211> 76
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (2)...(8)
<223> Xaa = any amino acid
<400> 58
Glu Xaa Ala Ala Xaa Ser Xaa Xaa Pro Pro Phe Phe Phe Phe Phe
1
               5
                                 10
25
Phe Cys Leu Val Thr Gln Phe Leu Ile Ile Val Asn Gly Lys Gln Lys
Ser Asn Tyr Met Lys Ser Ser Ile Phe Cys Met Phe Gln Leu Phe Phe
Ile Val Phe Thr Cys Lys Val Leu Lys Val Gly Ser
```

```
<210> 59
<211> 199
<212> DNA
<213> Homo sapiens
<400> 59
ggatccctgg ctgccttctt catccgagga cgccgaggcc aagctcagca gcaccgcaca 60
cagcagcage gtcagcecta teeggaceeg cateeteete teggggeegg tgccaacee 120
tagagetgte geettegeet etgecaceae ggaeteagee accaeegeeg ectegeegeg 180
tcgacgcggc cgcgaattc
                                                                   199
<210> 60
<211> 66
<212> PRT
<213> Homo sapiens
<400> 60
Asn Ser Arg Pro Arg Arg Gly Glu Ala Ala Val Ala Glu Ser
                                     10
Val Val Ala Glu Ala Lys Ala Thr Ala Leu Gly Val Gly Thr Gly Pro
                                 25
Glu Arg Arg Met Arg Val Arg Ile Gly Leu Thr Leu Leu Cys Ala
                             40
                                                 45
Val Leu Leu Ser Leu Ala Ser Ala Ser Ser Asp Glu Glu Gly Ser Gln
    50
                        55 -
Gly Ser
65
<210> 61
<211> 489
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (456)...(489)
<223> n = A, C, G or T
<400> 61
ggatccggca accatgacca gcgagaccac caccagggca ccaaagagga tcttggtgag 60
gcagttcact tccaagtcga acaggccgat cttacttcgg ggatttgagg tattcatgac 120
actocggagt tototgccag tgtaaagaac aacacccaca acagtacctg atgcgaccac 180
agtgccagcc cacagcgtgt tctctatgct caggctctcg ctgatcgggg ggtcgctgtc 240
ttctcgggta aaagttccca cgaagttgtg aatgtcaata tttggctctt ctgcgtacac 300
atacgatcga atctgaagaa ggtcggcggc cgtggggagc ctctgcgtgc aggccacggg 360
aagccgcagc ttccagtccg tctccccatc cagctgatcc gtccgcaaga agcatgaccc 420
```

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gtttttttct gatgtcctca ggaagatcat gtcggnnggg acccgctggt cgangcggcc 480
nccaattcn
                                                                      489
<210> 62
<211> 163
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(12)
<223> Xaa = any amino acid
<400> 62
Xaa Ile Gly Gly Arg Xaa Asp Gln Arg Val Pro Xaa Asp Met Ile Phe
                                      10
Leu Arg Thr Ser Glu Lys Asn Gly Ser Cys Phe Leu Arg Thr Asp Gln
                                  25
Leu Asp Gly Glu Thr Asp Trp Lys Leu Arg Leu Pro Val Ala Cys Thr
                              40
Gln Arg Leu Pro Thr Ala Ala Asp Leu Leu Gln Ile Arg Ser Tyr Val
                         55
Tyr Ala Glu Glu Pro Asn Ile Asp Ile His Asn Phe Val Gly Thr Phe
                                          75
Thr Arg Glu Asp Ser Asp Pro Pro Ile Ser Glu Ser Leu Ser Ile Glu
                 85
                                      90
                                                           95
Asn Thr Leu Trp Ala Gly Thr Val Val Ala Ser Gly Thr Val Val Gly
            100
                                  105
                                                      110
Val Val Leu Tyr Thr Gly Arg Glu Leu Arg Ser Val Met Asn Thr Ser
                             120
Asn Pro Arg Ser Lys Ile Gly Leu Phe Asp Leu Glu Val Asn Cys Leu
                         135
Thr Lys Ile Leu Phe Gly Ala Leu Val Val Val Ser Leu Val Met Val
145
                     150
                                          155
                                                               160
Ala Gly Ser
<210> 63
<211> 392
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (297)...(297)
\langle 223 \rangle n = A, C, G or T
<400> 63
ggatccgagt gctgatttgt acattgattc aggggagtaa ttggggagaa ggaaaaaggt 60
```

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ggggtggaat gctggctcgg ccctgccagt cacatgggtg gcagcagggc agctcagagg 120
 ttgcctgaag agttcgtttt tcttgctcca gtccatctgc aggggcccgt ttgctgctgc 180
 gtttctggtg ggccctctct ttggccatgg ccagggagat gttgaagtct aggatggggt 240
 cggaggagga ggtagacgag ggcgctgtgg agtcctgttt tggggggctg tcttggnaat 300
 tcagctcctc gctggtgtca ctggaggcgg atctcaccag ggctggcctg gggctctcca 360
 aggctgcctc tggtcgacgc ggccgcgaat tc
                                                                    392
 <210> 64
 <211> 127
 <212> PRT
 <213> Homo sapiens
<220>
<221> UNSURE
<222> (30)...(30)
<223> Xaa = any amino acid
<400> 64
Ile Arg Gly Arg Val Asp Gln Arg Gln Pro Trp Arg Ala Pro Gly Gln
 1
Pro Trp Asp Pro Pro Pro Val Thr Pro Ala Arg Ser Ile Xaa Lys Thr
                                 25
Ala Pro Gln Asn Arg Thr Pro Gln Arg Pro Arg Leu Pro Pro Pro
                             40
Thr Pro Ser Thr Ser Thr Ser Pro Trp Pro Trp Pro Lys Arg Gly Pro
                         55
                                             60
Thr Arg Asn Ala Ala Asn Gly Pro Leu Gln Met Asp Trp Ser Lys
                    70
                                         75
                                                             80
Lys Asn Glu Leu Phe Arg Gln Pro Leu Ser Cys Pro Ala Ala Thr His
                                     90
Val Thr Gly Arg Ala Glu Pro Ala Phe His Pro Thr Phe Phe Leu Leu
            100
                                 105
                                                     110
Pro Asn Tyr Ser Pro Glu Ser Met Tyr Lys Ser Ala Leu Gly Ser
        115
                             120
                                                 125
<210> 65
<211> 577
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (551)...(575)
<223> n = A, C, G or T
<400> 65
ggatcctttc acaaacccag caaccatcac aaacagaagg acgagaatat taacagctgt 60
gaagacttta ttcacccaag cagactcttt tactccaaaa gacaaaagac ctgctagaag 120
taatataagg cacacagcaa aaaaatcggg atattctgca agaccagtgt aattcattct 180
```

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gaagtatgtc ctcaaaaact gaccaatctg tttgctaaga agttcatcaa aggtgccact 240
ccaggetett geaacaettg atgtacetat cacataegat aaaatgagat tecageeagt 300
gatgaaggcc cacagctctc cgacagtcac gtaggtgtac aaatatgcag accccgtctt 360
gggaacacgg gccccaaatt cggcatagca gaggccagcc atcactgaag ccagggcagc 420
aatgaggaag gacaccacga tgctggggcc cgagtctgcc ttggccacct ccccagcgag 480
gacataaacc ccggccccaa gggtacttcc aacgcccagg gcaatgaggt ccatggtgga 540
taagcagcgg nataatttgg ngnnntntan actgncc
<210> 66
<211> 192
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(9)
<223> Xaa = any amino acid
<400> 66
Xaa Ser Xaa Xaa Xaa Lys Leu Xaa Arg Cys Leu Ser Thr Met Asp
                                     10
Leu Ile Ala Leu Gly Val Gly Ser Thr Leu Gly Ala Gly Val Tyr Val
Leu Ala Gly Glu Val Ala Lys Ala Asp Ser Gly Pro Ser Ile Val Val
Ser Phe Leu Ile Ala Ala Leu Ala Ser Val Met Ala Gly Leu Cys Tyr
                        55
Ala Glu Phe Gly Ala Arg Val Pro Lys Thr Gly Ser Ala Tyr Leu Tyr
                                         75
Thr Tyr Val Thr Val Gly Glu Leu Trp Ala Phe Ile Thr Gly Trp Asn
                                     90
                                                         95
Leu Ile Leu Ser Tyr Val Ile Gly Thr Ser Ser Val Ala Arg Ala Trp
            100
                                105
                                                     110
Ser Gly Thr Phe Asp Glu Leu Leu Ser Lys Gln Ile Gly Gln Phe Leu
                            120
Arg Thr Tyr Phe Arg Met Asn Tyr Thr Gly Leu Ala Glu Tyr Pro Asp
                        135
Phe Phe Ala Val Cys Leu Ile Leu Leu Leu Ala Gly Leu Leu Ser Phe
                    150
                                        155
                                                             160
Gly Val Lys Glu Ser Ala Trp Val Asn Lys Val Phe Thr Ala Val Asn
                165
                                    170
Ile Leu Val Leu Leu Phe Val Met Val Ala Gly Phe Val Lys Gly Ser
                                185
<210> 67
<211> 719
```

<212> DNA

<213> Homo sapiens

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<220>
 <221> unsure
 <222> (500)...(714)
 <223> n = A, C, G or T
 <400> 67
 ggatcctggt gcaagggcaa aaaaaaaaca caacacaaga aggaataagt cctgaattat 60
 tggcttcatc acatccacct tctccacccc aaaatggcac aaaagaaaca gttaccacac 120
 cctgcagacc ttttggtgta aaagagatga tgatgaactg gggtgggaac aggtcatgaa 180
 gatctgtcta aaaaagtccc attcaggtga gtttgtacac accatcaagc agcgagcctc 240
 tcatcaatta gggttaggga accaaggttc gattctcagg aaatcacaat ttcattcatt 300
 tactcaatat gaatttacaa agtgcctaca tattatccgc ttccacttgc agccatttct 360
agataaaaaa gaaacctggc atctcaaagg ggccaccaag ttctccccga gtctaccact 420
gaaaggacct tttttggaaa taggtttctt ctgtacctct ggaagggtaa catcttaaag 480
ctgaatcaac tttaacctgn agggctaaca tatttagcaa tacttgcatc ccagacatac 540
aacattaaaa gatacactaa attctgaagg tagctatgct gcaaaatagt tttaaaatta 600
aacaattgta cagtattcat ttatgcttgg aaattccagt cctagaccaa gcttgtggcc 660
accancattg accgttcttg ccatccagaa gagctgacag tgtcagttta atancctgg 719
<210> 68
<211> 227
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (2)...(67)
<223> Xaa = any amino acid
<400> 68
Arg Xaa Leu Asn His Cys Gln Leu Phe Trp Met Ala Arg Thr Val Asn
Xaa Gly Gly His Lys Leu Gly Leu Gly Leu Glu Phe Pro Ser Ile Asn
                                 25
Glu Tyr Cys Thr Ile Val Phe Asn Tyr Phe Ala Ala Leu Pro Ser Glu
                             40
Phe Ser Val Ser Phe Asn Val Val Cys Leu Gly Cys Lys Tyr Cys Ile
Cys Pro Xaa Arg Leu Lys Leu Ile Gln Leu Asp Val Thr Leu Pro Glu
65
                    70
                                         75
Val Gln Lys Lys Pro Ile Ser Lys Lys Gly Pro Phe Ser Gly Arg Leu
Gly Glu Asn Leu Val Ala Pro Leu Arg Cys Gln Val Ser Phe Leu Ser
            100
                                105
Arg Asn Gly Cys Lys Trp Lys Arg Ile Ile Cys Arg His Phe Val Asn
                            120
                                                 125
Ser Tyr Val Asn Glu Asn Cys Asp Phe Leu Arg Ile Glu Pro Trp Phe
                        135
                                            140
Pro Asn Pro Asn Glu Ala Arg Cys Leu Met Val Cys Thr Asn Ser Pro
145
                    150
                                        155
```

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Glu Trp Asp Phe Phe Arg Gln Ile Phe Met Thr Cys Ser His Pro Ser
                 165
 Ser Ser Ser Leu Leu His Gln Lys Val Cys Arg Val Trp Leu Phe
                                 185
 Leu Leu Cys His Phe Gly Val Glu Lys Val Asp Val Met Lys Pro Ile
                             200
                                                 205
 Ile Gln Asp Leu Phe Leu Leu Val Leu Cys Phe Phe Phe Ala Leu Ala
     210
                         215
                                             220
 Pro Gly Ser
 225
<210> 69
<211> 311
<212> DNA
<213> Homo sapiens
<400> 69
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gttgatgacc gggagcagaa actgctcgaa atcctcctcg ggctccagca cctccacttc 120
ctccggttcc gccagctcga cgatgtccag gggccgcatc tcttcccact gcctcggaac 180
cgcaatagcg atgtctgttg gagagagaaa accgacactc gctatgctta gcaatagaga 240
gcccgaatat tcctgaaaac ttttaccctt tttcaacttt tcttctcaga ggtcgacgcg 300
gccgcgaatt c
                                                                   311
<210> 70
<211> 102
<212> PRT
<213> Homo sapiens
<400> 70
Ile Arg Gly Arg Val Asp Leu Glu Glu Lys Leu Lys Gly Lys Ser
                                    10
Phe Gln Glu Tyr Ser Gly Ser Leu Leu Ser Ile Ala Ser Val Gly
                                25
Phe Leu Ser Pro Thr Asp Ile Ala Ile Ala Val Pro Arg Gln Trp Glu
                            40
Glu Met Arg Pro Leu Asp Ile Val Glu Leu Ala Glu Pro Glu Glu Val
                        55
Glu Val Leu Glu Pro Glu Glu Asp Phe Glu Gln Phe Leu Leu Pro Val
                    70
Ile Asn Glu Met Arg Glu Asp Ile Ala Ser Leu Thr Arg Glu His Gly
                85
                                    90
Arg Ala Tyr Arg Gly Ser
            100
<210> 71
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<211> 501 <212> DNA

<213> Homo sapiens

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<400> 71
ggatccggtg ctgccaatta aaaaaaaac tgtaaatcat cttaccaccc aaaagtgata 60
tggaaaactg tttgaatctg agcatggaca tggttgtagt catcttttgg aattataagt 120
gaaagtgata ggtaactcct tgtgttccat ttctcagagt agattgctat atccaaatga 180
tcatgaacac ccctcccatc ccacactcag atggaaagca gccagaaccc ctgccactgg 240
attetteage accettggga cagtetecaa etgacaette eeageagggg aggagggeag 300
gcacctttgg tgactcttca gtgagactcc atcgacattc agaatcttaa aatgttggta 360
atgaaaacca tggacctcca agtcatcctt accaacctta aatgtagtgt tgtgacatcc 420
aacgaaggac ttccacgtca cgtgggaata aatttgaaca gatacatcca attgaacata 480
ggtcgacgcg gccgcgaatt c
                                                                   501
<210> 72
<211> 163
<212> PRT
<213> Homo sapiens
<400> 72
Glu Phe Ala Ala Ser Thr Tyr Val Gln Leu Asp Val Ser Val Gln
                                     10
Ile Tyr Ser His Val Thr Trp Lys Ser Phe Val Gly Cys His Asn Thr
                                 25
Thr Phe Lys Val Gly Lys Asp Asp Leu Glu Val His Gly Phe His Tyr
                             40
Gln His Phe Lys Ile Leu Asn Val Asp Gly Val Ser Leu Lys Ser His
                        55
Gln Arg Cys Leu Pro Ser Ser Pro Ala Gly Lys Cys Gln Leu Glu Thr
                    70
Val Pro Arg Val Leu Lys Asn Pro Val Ala Gly Val Leu Ala Ala Phe
                                     90
His Leu Ser Val Gly Trp Glu Gly Cys Ser Ser Phe Gly Tyr Ser Asn
            100
                                105
                                                     110
Leu Leu Glu Met Glu His Lys Glu Leu Pro Ile Thr Phe Thr Tyr Asn
                            120
                                                 125
Ser Lys Arg Leu Gln Pro Cys Pro Cys Ser Asp Ser Asn Ser Phe Pro
                        135
                                             140
Tyr His Phe Trp Val Val Arg Phe Thr Val Phe Phe Leu Ile Gly Ser
145
                    150
                                        155
                                                             160
Thr Gly Ser
```

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<210> 73
<211> 747
<212> DNA
<213> Homo sapiens
<220>
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<221> unsure

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\langle 222 \rangle (139)...(139)
\langle 223 \rangle n = A, C, G or T
```

qgatcctgtt gcttcaaaag tcaattttat agaatcccaa ggtgtctgtt ctttggatat 60 gagtcggaaa tgaggaggat ttcttggaga aacttctggg gcaggaagat accagttttt 120 cctgatcaga aagtgcacnt ggaagatacc aaggaaaacc acaaagaggt gcattctcct 180 cacagtgagc tcggatacta tcattgatct caggaatgtg aggggttatg tgagaaattc 240 cagtataatc aaacccattg atccatattc cagagtcccg tttaactgca tttccttcca 300 agtcatggaa tgttctagtc atatgctgaa gaaacactct ctttggcttc ggattagcag 360 gattggagct atatggaaaa aatgttccac tgcaaacaag gaggaatgta attgcacata 420 ccaaagttaa agttagcatg gtttttttg tgctcttggc aaggtagatg aagttaatca 480 tgtaataaaa tcttttcgca agagtatgta taagtattat tttggctaca gttgcagttc 540 catacagaca aacggagacc atagaagtgg ttataccatg agagaagctg tccaataaga 600 gagatgaaca ctgctataat gagaacggta acaaggctag tgaaccagct gatcaaagtg 660 atgccaagtc cacacaagaa gtccttcttg tagttaccag tcttatgttt gggctgcaaa 720 aattttttgc ccaggtacaa aacaaca

<210> 74 <211> 238 <212> PRT <213> Homo sapiens

<400> 74

Cys Cys Phe Val Pro Gly Gln Lys Ile Phe Ala Ala Gln Thr Asp Trp 10 15 Leu Gln Glu Gly Leu Leu Val Trp Thr Trp His His Phe Asp Gln Leu 25 Val His Pro Cys Tyr Arg Ser His Tyr Ser Ser Val His Leu Ser Tyr 40 Trp Thr Val Ser Leu Met Val Pro Leu Leu Trp Ser Pro Phe Val Cys 55 Met Glu Leu Gln Leu Pro Lys Tyr Leu Tyr Ile Leu Leu Arg Lys Asp 70 75 Phe Ile Thr Leu Thr Ser Ser Thr Leu Pro Arg Ala Gln Lys Lys Pro Cys Leu Leu Trp Tyr Val Gln Leu His Ser Ser Leu Phe Ala Val Glu 100 105 110 His Phe Phe His Ile Ala Pro Ile Leu Leu Ile Arg Ser Gln Arg Glu 120 125 Cys Phe Phe Ser Ile Leu Glu His Ser Met Thr Trp Lys Glu Met Gln 135 140 Leu Asn Gly Thr Leu Glu Tyr Gly Ser Met Gly Leu Ile Ile Leu Glu 150 155 160 Phe Leu Thr Pro Leu Thr Phe Leu Arg Ser Met Ile Val Ser Glu Leu 165 170 Thr Val Arg Arg Met His Leu Phe Val Val Phe Leu Gly Ile Phe Xaa 185 Val His Phe Leu Ile Arg Lys Asn Trp Tyr Leu Pro Ala Pro Glu Val 195 200 205

```
Ser Pro Arg Asn Pro Pro His Phe Arg Leu Ile Ser Lys Glu Gln Thr
    210
                         215
Pro Trp Asp Ser Ile Lys Leu Thr Phe Glu Ala Thr Gly Ser
225
                     230
                                         235
<210> 75
<211> 712
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (712)...(712)
\langle 223 \rangle n = A, C, G or T
<400> 75
ggatccgggc acttctaaac atctaqatag actagatgtt tcaagtaagg agttaatttg 60
tctactatgt atacagcagt cttgaataaa ctgcaaacat gtaacaacag ttataatttg 120
aaagagtctt ccaaatgtga acattctggc ctagaaccct tcccatctcc atcaacccag 180
aagacatcaa attttcagaa gacaatcttt cctaggactt gtaaaacaaa atgtacaaaa 240
tatattagtt tactaactct acttttgtca tacactggca acctctttaa catccagaaa 300
gactagatgt tgtcaattag gactcgtctg tcctttatgt acactatata cacagataag 360
taaaacaaaa tgcacagaca taatgattca tcttgcctcg ctgtaaacag gatggcatag 420
agetetetge aceteceet ceteteteet eccetgaace actgeacaaa cacaatgagt 480
attactcaac aggtgatttg gccattcccc cccaaaaata tttcctatga attgtaacaa 540
aaaggtattt acaaaatgtg attttgctac ctctaatttt aacatatcag gcacttcaga 600
acatctaaaa aqaaqaqaca tttcaaaaaa gcttagcatt gtcaactata tacacagtag 660
tgaggaataa aatgcacaca aaacaatgga tagaatatga aaatgtcttc tn
<210> 76
<211> 227
<212> PRT
<213> Homo sapiens
<400> 76
Arg Arg His Phe His Ile Leu Ser Ile Val Leu Cys Ala Phe Tyr Ser
                                     10
                                                         15
Ser Leu Leu Cys Ile Leu Thr Met Leu Ser Phe Phe Glu Met Ser Leu
                                 25
Leu Phe Arg Cys Ser Glu Val Pro Asp Met Leu Lys Leu Glu Val Ala
Lys Ser His Phe Val Asn Thr Phe Leu Leu Gln Phe Ile Gly Asn Ile
                        55
                                             60
Phe Gly Glu Trp Pro Asn His Leu Leu Ser Asn Thr His Cys Val
                                                             80
Cys Ala Val Val Gln Gly Arg Arg Glu Glu Gly Glu Val Gln Arg Ala
                                     90
Leu Cys His Pro Val Tyr Ser Glu Ala Arg Ile Ile Met Ser Val His
            100
                                105
```

```
Phe Val Leu Leu Ile Cys Val Tyr Ser Val His Lys Gly Gln Thr Ser
         115
                            120
 Pro Asn Gln His Leu Val Phe Leu Asp Val Lys Glu Val Ala Ser Val
                        135
                                            140
 Gln Lys Ser Thr Asn Ile Phe Cys Thr Phe Cys Phe Thr Ser Pro Arg
                    150
                                        155
 Lys Asp Cys Leu Leu Lys Ile Cys Leu Leu Gly Trp Arg Trp Glu Gly
                165
                                    170
 Phe Ala Arg Met Phe Thr Phe Gly Arg Leu Phe Gln Ile Ile Thr Val
                                185
 Val Thr Cys Leu Gln Phe Ile Gln Asp Cys Cys Ile His Ser Arg Gln
        195
                            200
                                               205
 Ile Asn Ser Leu Leu Glu Thr Ser Ser Leu Ser Arg Cys Leu Glu Val
                        215
                                           220
 Pro Gly Ser
 225
<210> 77
<211> 605
<212> DNA
<213> Homo sapiens
<400> 77
ggatccctgc caaaggttta aaggtatgtc cgccatgcat tcctccccaa agtgcacact 60
gatggcagat acacttctta caagtccagc aaaatacact aagtttttca tggtgatttt 120
cacatttgtc cttttcattt tcttcatgtt tggtgagact gcagagttga agagtatcaa 180
cacggcaatg aggacattga gctctctgct ctgtcagcca gcgcctaata cagctgaaac 300
aacacagttt ggagcaatga ggacacaggc gtgcatcccg caatttctcc atacaaatga 360
aacatcggaa aacctcagca atgctctcca cgctctgttc atccattgcc tccggctctc 420
ggcggggccg ctggcgaccc gcaggctccg cagtctgacc tcttaggcgc cggcccgagg 480
tegecagate aaategeega taaaageeeg gegeeeaegt eagggggete tgacaaeege 540
cccacctgcg cgcccatct cttcaggtcc agcgccgcct accccgtcga cgcggccgcg 600
aattc
                                                                605
<210> 78
<211> 195
<212> PRT
<213> Homo sapiens
<400> 78
Ile Arg Gly Arg Val Asp Gly Val Gly Gly Ala Gly Pro Glu Glu Met
Gly Arg Ala Gly Gly Ala Val Val Arg Ala Pro Arg Gly Arg Arg Ala
                               25
Phe Ile Gly Asp Leu Ile Trp Arg Pro Arg Ala Gly Ala Glu Val Arg
Leu Arg Ser Leu Arg Val Ala Ser Gly Pro Ala Glu Ser Arg Gln
                                           60
```

```
Trp Met Asn Arg Ala Trp Arg Ala Leu Leu Arg Phe Ser Asp Val Ser
 Phe Val Trp Arg Asn Cys Gly Met His Ala Cys Val Leu Ile Ala Pro
Asn Cys Val Val Ser Ala Val Leu Gly Ala Gly Gln Ser Arg Glu Leu
             100
                                 105
                                                      110
Asn Val Leu Ile Ala Val Leu His Ser Ser Tyr Glu Asn Ile Val Val
         115
                             120
                                                  125
Gly Gln Lys Lys His Asn Ser Leu Ile Leu Phe Asn Ser Ala Val Ser
                         135
                                             140
Pro Asn Met Lys Lys Met Lys Arg Thr Asn Val Lys Ile Thr Met Lys
                     150
                                         155
Asn Leu Val Tyr Phe Ala Gly Leu Val Arg Ser Val Ser Ala Ile Ser
                 165
                                     170
Val His Phe Gly Glu Glu Cys Met Ala Asp Ile Pro Leu Asn Leu Trp
             180
                                 185
                                                     190
Gln Gly Ser
        195
<210> 79
<211> 875
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (569) . . . (875)
<223> n = A, C, G or T
<400> 79
ggatccatta cctttgaaag agccaaaaaa caaaaaaaaa aaaaaaaaa aattaccatg 60
ccagttttat tecegitgaa tatttaeaee ttggaeagea aacettgete acataaagta 120
gaaaacagat acaataaaac atggcttgaa aaatgaccag agtatgcacc tgtagtactg 180
tacactaaat aaaatacaca aggcagcaat acttaggggc cagaaacact gcttactaca 240
agtcagttac ggaatcataa tttacagtaa aaatgggcac gtcccaaggc tcaattttc 300
tttttctttt gtcatttaca gtagaataaa tattttgttg ctattgctac actttaattt 360
acattctaac ctattaaatg cagaaagcta gtgtaaagca tatagattaa gtgtaggtcc 420
catacgtatg acagtttgtt caagactagt aggtttttgt ttttgtatct ttttttaact 480
tattaaatgg ctagtgggaa agatttgtgc ttgtgatcag ctcttaactt caattttaca 540
tcaaaacgtc cctgaaaacg gtctttctna ctggacccaa tgttctcacc gtacgcctta 600
cactntatgc gaattcagtg tccatggtaa gatgggtgaa tgtacggccg caaggggctt 660
naagtantig gettgaagga attgeetagt eeggaaatet geaaggaaac eaggggagtt 720
gccagtccaa atctcccatt ccacttatct tacttattnn ttgccgtgac tgacggaagg 780
ctttgggtna cttatcntgg gaagntccag gctattttgg agctagttga nctaactggt 840
gnctttaaaa gccggttgcc tttgaccaaa attan
                                                                   875
<210> 80
<211> 276
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<212> PRT

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<220>
 <221> UNSURE
 <222> (11)...(96)
 <223> Xaa = any amino acid
<400> 80
Asn Phe Gly Gln Arg Gln Pro Ala Phe Lys Xaa Thr Ser Xaa Asn Leu
                                     10
Gln Asn Ser Leu Xaa Leu Pro Xaa Ile Ser Xaa Pro Lys Pro Ser Val
                                 25
Ser His Gly Xaa Xaa Val Arg Val Glu Trp Glu Ile Trp Thr Gly Asn
Ser Pro Gly Phe Leu Ala Asp Phe Arg Thr Arg Gln Phe Leu Gln Ala
                         5.5
                                             60
Xaa Tyr Xaa Lys Pro Leu Ala Ala Val His Ser Pro Ile Leu Pro Trp
                     70
                                         75
Thr Leu Asn Ser His Xaa Val Gly Val Arg Glu His Trp Val Gln Xaa
Glu Arg Pro Phe Ser Gly Thr Phe Cys Lys Ile Glu Val Lys Ser Ser
            100
                                 105
Gln Ala Gln Ile Phe Pro Thr Ser His Leu Ile Ser Lys Lys Ile Gln
                             120
                                                 125
Lys Gln Lys Pro Thr Ser Leu Glu Gln Thr Val Ile Arg Met Gly Pro
                        135
                                             140
Thr Leu Asn Leu Tyr Ala Leu His Leu Ser Ala Phe Asn Arg Leu Glu
                    150
                                         155
Cys Lys Leu Lys Cys Ser Asn Ser Asn Lys Ile Phe Ile Leu Leu Met
                165
                                    170
Thr Lys Glu Lys Glu Lys Leu Ser Leu Gly Thr Cys Pro Phe Leu Leu
            180
                                185
Ile Met Ile Pro Leu Thr Cys Ser Lys Gln Cys Phe Trp Pro Leu Ser
        195
                            200
Ile Ala Ala Leu Cys Ile Leu Phe Ser Val Gln Tyr Tyr Arg Cys Ile
                        215
Leu Trp Ser Phe Phe Lys Pro Cys Phe Ile Val Ser Val Phe Tyr Phe
                    230
                                         235
Met Ala Arg Phe Ala Val Gln Gly Val Asn Ile Gln Arg Glu Asn Trp
                245
                                    250
His Gly Asn Phe Phe Phe Phe Phe Leu Phe Gly Ser Phe Lys
                                265
                                                     270
Gly Asn Gly Ser
        275
<210> 81
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<213> Homo sapiens

<211> 631 <212> DNA

<213> Homo sapiens

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<400> 81
 ggatccctcc acctcgatct tgccgcagtc tgcgatgatc acatccttca ggggtttatc 60
 ccggctgtct gtcttggtgc tctccacctt ccgcaccacc tccatgccct ctagaacttt 120
gccaaacacc acatgcttgc catctagcca ggctgtcttg actgtcgtga tgaagaactg 180
ggagccgttg gtgtctttgc ctgcgttggc catgctcacc cagccaggcc cgtagtgctt 240
cagtttgaag ttctcatcgg ggaagcgctc accgtagatg ctctttcctc ctgtgccatc 300
tcccctggtg aagtctccgc cctggatcat gaagtccttg attacacgat ggaatttgct 360
gtttttgtag ccaaatcett teteteetgt agetaaggee acaaaattat ccaetgtttt 420
tggaacagtc tttccgaaga gaccaaagat cacccggcct acatcttcat ctccaattcg 480
taggtcaaaa tacaccttga cggtgacttt gggccccttc ttcttctcat cggccgcaga 540
aggtcccggc agcagcagga agaagacgga ccccgcgatg aaggcggcgg caaggagcac 600
ccttatgttg cgtcgacgcg gccgcgaatt c
                                                                   631
<210> 82
<211> 210
<212> PRT
<213> Homo sapiens
<400> 82
Asn Ser Arg Pro Arg Arg Asn Ile Arg Val Leu Leu Ala Ala
                                     10
Phe Ile Ala Gly Ser Val Phe Phe Leu Leu Pro Gly Pro Ser Ala
                                 25
Ala Asp Glu Lys Lys Gly Pro Lys Val Thr Val Lys Val Tyr Phe
                             40
Asp Leu Arg Ile Gly Asp Glu Asp Val Gly Arg Val Ile Phe Gly Leu
                        55 -
                                             60
Phe Gly Lys Thr Val Pro Lys Thr Val Asp Asn Phe Val Ala Leu Ala
Thr Gly Glu Lys Gly Phe Gly Tyr Lys Asn Ser Lys Phe His Arg Val
                85
Ile Lys Asp Phe Met Ile Gln Gly Gly Asp Phe Thr Arg Gly Asp Gly
                                105
                                                     110
Thr Gly Gly Lys Ser Ile Tyr Gly Glu Arg Phe Pro Asp Glu Asn Phe
                            120
                                                 125
Lys Leu Lys His Tyr Gly Pro Gly Trp Val Ser Met Ala Asn Ala Gly
                        135
                                            140
Lys Asp Thr Asn Gly Ser Gln Phe Phe Ile Thr Thr Val Lys Thr Ala
                    150
                                        155
Trp Leu Asp Gly Lys His Val Val Phe Gly Lys Val Leu Glu Gly Met
                165
                                    170
                                                         175
Glu Val Val Arg Lys Val Glu Ser Thr Lys Thr Asp Ser Arg Asp Lys
            180
                                185
Pro Leu Lys Asp Val Ile Ile Ala Asp Cys Gly Lys Ile Glu Val Glu
        195
                                                205
Gly Ser
    210
```

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<211> 452
<212> DNA
<213> Homo sapiens
<400> 83
ggatccgccc attgtaattc catgaataag tgcaacataa ggtttctggc aagaacctga 60
aagaaacaga gcaacagcat tattcagcat atattcttct ctgaagaaaa ctggagctat 120
cttctgtttt gccttttcag cttccgagat cactaggaag gaaagattac aaataaaaa 180
aaaaagattt aatagtcaac attgtcaact agatcaaaag tattatgaaa attaaatact 240
gggggaaggg agtactctaa aatgacttgt taaaagtttt gaagttgccc ctgccacaga 300
cattatatta tagtcacaga tccatagtcc aatgtcaaag cttcaaggca aaaattccta 360
ttcttgtttt ccatgcttct tacaaaatgt tagattagaa attataggct gggcatggtg 420
gctcaaacct gtgtcgacgc ggccgcgaat tc
<210> 84
<211> 143
<212> PRT
<213> Homo sapiens
<400> 84
Ile Arg Gly Arg Val Asp Thr Gly Leu Ser His His Ala Gln Pro Ile
Ile Ser Asn Leu Thr Phe Cys Lys His Gly Lys Gln Glu Glu Phe
                                 25
Leu Pro Ser Phe Asp Ile Gly Leu Trp Ile Cys Asp Tyr Asn Ile Met
Ser Val Ala Gly Ala Thr Ser Lys Leu Leu Thr Ser His Phe Arg Val
                        55
Leu Pro Ser Pro Ser Ile Phe Ser Tyr Phe Ser Ser Gln Cys Leu Leu
                    70
                                         75
Asn Leu Phe Phe Ile Cys Asn Leu Ser Phe Leu Val Ile Ser Glu
                                     90
Ala Glu Lys Ala Lys Gln Lys Ile Ala Pro Val Phe Phe Arg Glu Glu
            100
                                105
                                                     110
Tyr Met Leu Asn Asn Ala Val Ala Leu Phe Leu Ser Gly Ser Cys Gln
                            120
                                                 125
Lys Pro Tyr Val Ala Leu Ile His Gly Ile Thr Met Gly Gly Ser
    130
                        135
                                             140
<210> 85
<211> 752
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (462)...(748)
<223> n = A, C, G or T
```

<210> 83

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<400> 85
 ggatccggtc aggggaaaga agggccggta ctggatctgg cagtaccaga gcagcagcaa 60
 cagcaggage ageaggggea geageagget geegatttee ageeeggagg ggeegggete 120
ggaccccggc gggcaggggg gatttggggg accgactctc gtggacacgt ggcagtggag 180
 aacgcagttg ggagggaggt gaaggctgcc cagggtctgg gtgtcgtcgc ctagcagctg 240
cccttggtag atgagtcgca cctgctgttc ccggccggga aactgggtcc ttttcaagga 300
gccaatggtg tcgtggggcc aggccctggc cacctgctct gaatcattga ggaatttcag 360
cccgtagcac gaggggctcc tgcggggagt ccggggctgg cggtgttgct gtgaaccccg 420
tgctgggctc tggctgtgca gcttgacctt ctggtgtctc angctggggg tctctgcccc 480
tgggggccttc cctctcatgc tgtcggtagc tgccatggct tgccgctggg ctgggatggc 540
gttggggtcc ctgacggctg gggcaatggg tccccggcct tnacggtgtg ccttgaaaac 600
ccagccangg ccaacaccag aanggcaagg caagcnccga naaaaggacg gtcacttcat 660
cacccaaccc nttnatcang gtcatngcgc ctggcttgcc cgccggcnta ccgancgccg 720
ggttccccan ttccttnacc cggccggnaa tt
<210> 86
<211> 247
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(94)
<223> Xaa = any amino acid
<400> 86
Xaa Pro Ala Gly Xaa Arg Xaa Trp Gly Thr Arg Arg Ser Val Xaa Arg
Arg Ala Ser Gln Ala Xaa Pro Xaa Xaa Gly Trp Val Met Lys Pro Ser
                                 25
Phe Xaa Arg Xaa Leu Pro Cys Xaa Ser Gly Val Gly Xaa Gly Trp Val
                             40
Phe Lys Ala His Arg Xaa Gly Arg Gly Pro Ile Ala Pro Ala Val Arg
                        55
                                             60
Asp Pro Asn Ala Ile Pro Ala Gln Arg Gln Ala Met Ala Ala Thr Asp
Ser Met Arg Gly Lys Ala Pro Gly Ala Glu Thr Pro Ser Xaa Arg His
                                     90
Gln Lys Val Lys Leu His Ser Gln Ser Pro Ala Arg Gly Ser Gln Gln
            100
                                 105
                                                     110
His Arg Gln Pro Arg Thr Pro Arg Arg Ser Pro Ser Cys Tyr Gly Leu
                            ·120
Lys Phe Leu Asn Asp Ser Glu Gln Val Ala Arg Ala Trp Pro His Asp
                        135
                                             140
Thr Ile Gly Ser Leu Lys Arg Thr Gln Phe Pro Gly Arg Glu Gln Gln
                    150
                                         155
                                                             160
Val Arg Leu Ile Tyr Gln Gly Gln Leu Leu Gly Asp Asp Thr Gln Thr
                165
                                     170
Leu Gly Ser Leu His Leu Pro Pro Asn Cys Val Leu His Cys His Val
```

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180
                                 185
                                                      190
Ser Thr Arg Val Gly Pro Pro Asn Pro Pro Cys Pro Pro Gly Ser Glu
                             200
                                                 205
Pro Gly Pro Ser Gly Leu Glu Ile Gly Ser Leu Leu Pro Leu Leu
    210
                         215
Leu Leu Leu Leu Leu Trp Tyr Cys Gln Ile Gln Tyr Arg Pro
                    230
                                         235
Phe Phe Pro Leu Thr Gly Ser
                245
<210> 87
<211> 396
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (375)...(395)
\langle 223 \rangle n = A, C, G or T
<400> 87
ggatcccaga gtattctgac agataaaatc ggggaggcag ttatgaatac cactctcaca 60
ctcgtcaata tctttgcagc tattgtcctc tgtgagctca tagccagtcc cgcagctgct 120
gtcccgctgg cagcggaaag agcccactgt gttgatgcag gattctccaa gccgqcagct 180
gtggctgccc gtgatgcatt cattgacatc ttcacaggag acaccatcag acagcagctg 240
gtagcccacg aagcaggage agaccaccte gteaccegtg teteggeact getgettgea 300
gggcccgcct cctcggcagc ggtcattcag atatgggtcc tcttgttcct cctcaacctc 360
aatgatctta tccgnnnttg gangcccccn acntnc
                                                                    396
<210> 88
<211> 132
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(8)
<223> Xaa = any amino acid
<400> 88
Xaa Xaa Xaa Gly Xaa Pro Xaa Xaa Asp Lys Ile Ile Glu Val Glu Glu
 1
Glu Gln Glu Asp Pro Tyr Leu Asn Asp Arg Cys Arg Gly Gly Pro
                                25
Cys Lys Gln Gln Cys Arg Asp Thr Gly Asp Glu Val Val Cys Ser Cys
Phe Val Gly Tyr Gln Leu Leu Ser Asp Gly Val Ser Cys Glu Asp Val
                        55
Asn Glu Cys Ile Thr Gly Ser His Ser Cys Arg Leu Gly Glu Ser Cys
```

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80
                                         75
65
                     70
Ile Asn Thr Val Gly Ser Phe Arg Cys Gln Arg Asp Ser Ser Cys Gly
                                     90
                85
Thr Gly Tyr Glu Leu Thr Glu Asp Asn Ser Cys Lys Asp Ile Asp Glu
                                                      110
                                 105
            100
Cys Glu Ser Gly Ile His Asn Cys Leu Pro Asp Phe Ile Cys Gln Asn
                             120
Thr Leu Gly Ser
    130
<210> 89
<211> 558
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (304)...(513)
\langle 223 \rangle n = A, C, G or T
<400> 89
ggatccagac ccacgaggga catatgaatt ttcattcagc agcttgatgg tgctggtgaa 60
qtctqtqctq tccaqtttct ccqacaactt tctcttcagg tcatcccaat ataagcgacg 120
tgctgcaggg aagtcctctc ctggctcctc cctcactgga gactcggttc ctgccagtct 180
ctcacactca gtttttggtt ctaccccttt acaatagccc aagtagccaa tcataaatcc 240
aatcaaqaaa aaqacqatca caqcaataqt cccataqcaq atacttccac tacacctttt 300
tggntttgtg acattggcct ttgtgttatt gtcagcattt tcttcttcat ctacagcaag 360
tttcatctnc acatgactgt tatcgccatc tacttgccga gccaggctga accgggtata 420
tgacaatggt tctccaccaa acaagttaga gaatgctgat ctagcttgat ccatcattct 480
gaactgccac acagaagaca ctagcgcgtc ctncgtcccg agccgcaccc gatatcccgt 540
                                                                    558
cgacgcggcc gcgaattc
<210> 90
<211> 186
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (16)...(85)
<223> Xaa = any amino acid
<400> 90
Glu Phe Ala Ala Ala Ser Thr Gly Tyr Arg Val Arg Leu Gly Thr Xaa
Asp Ala Leu Val Ser Ser Val Trp Gln Phe Arg Met Met Asp Gln Ala
                                 25
Arg Ser Ala Phe Ser Asn Leu Phe Gly Gly Glu Pro Leu Ser Tyr Thr
        35
                             40
                                                  45
```

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Arg Phe Ser Leu Ala Arg Gln Val Asp Gly Asp Asn Ser His Val Xaa
 Met Lys Leu Ala Val Asp Glu Glu Glu Asn Ala Asp Asn Asn Thr Lys
                     70
 Ala Asn Val Thr Xaa Pro Lys Arg Cys Ser Gly Ser Ile Cys Tyr Gly
                 85
                                      90
 Thr Ile Ala Val Ile Val Phe Phe Leu Ile Gly Phe Met Ile Gly Tyr
             100
                                 105
                                                      110
Leu Gly Tyr Cys Lys Gly Val Glu Pro Lys Thr Glu Cys Glu Arg Leu
         115
                             120
Ala Gly Thr Glu Ser Pro Val Arg Glu Glu Pro Gly Glu Asp Phe Pro
                         135
                                              140
Ala Ala Arg Arg Leu Tyr Trp Asp Asp Leu Lys Arg Lys Leu Ser Glu
                     150
                                          155
Lys Leu Asp Ser Thr Asp Phe Thr Ser Thr Ile Lys Leu Leu Asn Glu
                 165
                                     170
                                                          175
Asn Ser Tyr Val Pro Arg Gly Ser Gly Ser
                                 185
<210> 91
<211> 461
<212> DNA
<213> Homo sapiens
<400> 91
ggatcccttt gtatataaaa tggtgaaagc tgacttgaat gtgccgtcac cactctgctg 60
ggaaaaacag atgaaggtgg cccagagaaa accacagact ccagcgtaag ctgttctcca 120
ttgaacagga acaaggctga agttggtcag ctgtacaaag ggccagtaca tcagtccact 180
cagataggta ttccagaatt tctgtttcag gtccaaaaat atgtcatcct ttccttggag 240
aatgctcata ccgacataga aggccgagac cgcgatgggc gcaccgacca cctggtcgca 300
cagcaacttg gccagcaggg cgtgcggcgc tcggcccggg agcgcgcgct ccagcaggcg 360
cagccacacg tagttgaagt tggcgtggaa ggtcaccacc aacgtggcca cgcgccgcgt 420
ctggcgccag ttggcctcgc ggtcgacgcg gccgcgaatt c
                                                                    461
<210> 92
<211> 153
<212> PRT
<213> Homo sapiens
<400> 92
Ile Arg Gly Arg Val Asp Arg Glu Ala Asn Trp Arg Gln Thr Arg Arg
 1
Val Ala Thr Leu Val Val Thr Phe His Ala Asn Phe Asn Tyr Val Trp
                                25
Leu Arg Leu Leu Glu Arg Ala Leu Pro Gly Arg Ala Pro His Ala Leu
                                                 45
Leu Ala Lys Leu Leu Cys Asp Gln Val Val Gly Ala Pro Ile Ala Val
                        55
Ser Ala Phe Tyr Val Gly Met Ser Ile Leu Gln Gly Lys Asp Asp Ile
```

```
65
                      70
                                          75
 Phe Leu Asp Leu Lys Gln Lys Phe Trp Asn Thr Tyr Leu Ser Gly Leu
                                      90
 Met Tyr Trp Pro Phe Val Gln Leu Thr Asn Phe Ser Leu Val Pro Val
                                  105
                                                      110
 Gln Trp Arg Thr Ala Tyr Ala Gly Val Cys Gly Phe Leu Trp Ala Thr
                              120
 Phe Ile Cys Phe Ser Gln Gln Ser Gly Asp Gly Thr Phe Lys Ser Ala
                         135
                                              140
 Phe Thr Ile Leu Tyr Thr Lys Gly Ser
 145
                     150
 <210> 93
 <211> 603
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (21)...(574)
\langle 223 \rangle n = A, C, G or T
<400> 93
ggatccagtg ctataataac nattacacac attgtaactc ctacacaatt tgaaattttc 60
aagttaagac aaaggtaact atatatagaa gcagtatgtt ttctgaaccc ttacagattg 120
ttttgcacac tcctggatta cacacatctc atcaatctca agaataaaat caaagtcttt 180
ggcttgacag ccttccacaa tctgacctct gttttctcgc cagcctcatc tcctgtcatt 240
cacaacattt ccagcattcc aaccagtctg aacttttgca gtttcccacg tgcgctaggc 300
tctttcttca tcagcatctc tatgcatgct gtctcctgct actggaatgc cctcattctc 360
gttgcttcct gttttgaaga aaagctgtga taccggcaac agtgtttaag tatcacacgg 420
gtagttaaaa ggcaagttgg tcctatctga catgtggaaa tggccagctc gttagaaggc 480
agtacctggt gaagcccggg cacgcgagtt cacgccagcg acagtggaaa gcccttccct 540
ngcaagcgcg cttccggcac tagccgnacc ccgncgagct ctggtcgacg cggccgcgaa 600
ttc
                                                                    603
<210> 94
<211> 195
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (13)...(189)
<223> Xaa = any amino acid
<400> 94
Glu Phe Ala Ala Ser Thr Arg Ala Arg Arg Gly Xaa Ala Ser Ala
 1
                                     10
Gly Ser Ala Leu Ala Arg Glu Gly Leu Ser Thr Val Ala Gly Val Asn
```

```
20
                                 25
 Ser Arg Ala Arg Ala Ser Pro Gly Thr Ala Phe Arg Ala Gly His Phe
                             40
 His Met Ser Asp Arg Thr Asn Leu Pro Phe Asn Tyr Pro Cys Asp Thr
 Thr Leu Leu Pro Val Ser Gln Leu Phe Phe Lys Thr Gly Ser Asn Glu
                     70
 Asn Glu Gly Ile Pro Val Ala Gly Asp Ser Met His Arg Asp Ala Asp
Glu Glu Arg Ala Arg Thr Trp Glu Thr Ala Lys Val Gln Thr Gly Trp
                                 105
Asn Ala Gly Asn Val Val Asn Asp Arg Gly Trp Arg Glu Asn Arg
         115
                                                 125
Gly Gln Ile Val Glu Gly Cys Gln Ala Lys Asp Phe Asp Phe Ile Leu
                         135
Glu Ile Asp Glu Met Cys Val Ile Gln Glu Cys Ala Lys Gln Ser Val
                     150
                                         155
Arg Val Gln Lys Thr Tyr Cys Phe Tyr Ile Leu Pro Leu Ser Leu Glu
                 165
                                     170
Asn Phe Lys Leu Cys Arg Ser Tyr Asn Val Cys Asn Xaa Tyr Tyr Ser
            180
                                 185
                                                     190
Thr Gly Ser
        195
<210> 95
<211> 813
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (529)...(789)
<223> n = A, C, G or T
<400> 95
ggatcctact gaaatggaaa aggttgaaaa atgtatcagt gatgccatga gttggctgaa 60
tagtaagatg aatgcacaga acaaactaag tctcactcaa gatcctgtgg taaaagtttc 120
agaaatagta gcaaagtcaa aggaactgga taatttctgt aaccccatca tttacaagcc 180
caaaccaaaa gcagaagttc ctgaagacaa accaaaagct aatagtgaac acaatggccc 240
aatggatgga cagagtggaa ctgaaactaa atcagattca acaaaagaca gctcacagca 300
tactaaatcc tctggagaga tggaagtgga ctaagtctta attttacctt cacattaatt 360
caaaccgtgc aagtaaccac ggggtccatc ttttacatct ggtacacaca acagacgctc 420
agttgttctt aaccactttt gtcatttggt ttttggagta gttttgaaaa gtggtttata 480
ttgagtgcac ttctggtcat ttccattgct gcttatatgc agtggtagnc cgaattagat 540
ttaccaggac aatctaagct ttccggataa ttttatatat caaacattcn ggatggatac 600
ctagttggca acagtctacc ttatttaagc ttctactggg ataaacctca ttnctttatt 660
caggaaagga totttaatgn antattggtg naaaagcota gattaatngc tottantttg 720
aaaaccaatg gaaaattgga ngggnttaaa gttccgaggc ctggcctttt ttagtatggg 780
atgntccant taaataaact caattttcct ctt
                                                                   813
```

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<210> 96
 <211> 258
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> UNSURE
 <222> (8)...(70)
<223> Xaa = any amino acid
<400> 96
Lys Arg Lys Ile Glu Phe Ile Xaa Xaa His Pro Ile Leu Lys Lys Ala
Arg Pro Arg Asn Phe Xaa Pro Xaa Gln Phe Ser Ile Gly Phe Gln Xaa
                                 25
Lys Ser Xaa Ser Arg Leu Xaa His Gln Xaa Xaa Ile Lys Asp Pro Phe
Leu Asn Lys Xaa Met Arg Phe Ile Pro Val Glu Ala Ile Arg Thr Val
Ala Asn Val Ser Ile Xaa Asn Val Tyr Ile Lys Leu Ser Gly Lys Leu
                     70
                                         75
Arg Leu Ser Trp Ile Phe Gly Leu Pro Leu His Ile Ser Ser Asn Gly
                                     90
Asn Asp Gln Lys Cys Thr Gln Tyr Lys Pro Leu Phe Lys Thr Thr Pro
            100
                                 105
                                                     110
Lys Thr Lys Gln Lys Trp Leu Arg Thr Thr Glu Arg Leu Cys Val
        115
                             120
                                                 125
Pro Asp Val Lys Asp Gly Pro Arg Gly Tyr Leu His Gly Leu Asn Cys
                        135
                                             140
Glu Gly Lys Ile Lys Thr Ser Thr Ser Ile Ser Pro Glu Asp Leu Val
                    150
                                         155
Cys Cys Glu Leu Ser Phe Val Glu Ser Asp Leu Val Ser Val Pro Leu
                165
                                     170
Cys Pro Ser Ile Gly Pro Leu Cys Ser Leu Leu Ala Phe Gly Leu Ser
            180
                                 185
Ser Gly Thr Ser Ala Phe Gly Leu Gly Leu Met Met Gly Leu Gln Lys
                            200
                                                 205
Leu Ser Ser Ser Phe Asp Phe Ala Thr Ile Ser Glu Thr Phe Thr
                        215
                                             220
Gly Ser Val Arg Leu Ser Leu Phe Cys Ala Phe Ile Leu Leu Phe Ser
                    230
                                         235
Gln Leu Met Ala Ser Leu Ile His Phe Ser Thr Phe Ser Ile Ser Val
                245
                                     250
                                                         255
Gly Ser
```

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<212> DNA
<213> Homo sapiens
<400> 97
ggatccgggg tcgaagcagt tggattccat gatgggaagg ccattggcct ctcggtattt 60
cacaagcete teagettege ggegggacea etettteate etgtagteag geagatagge 120
cacaaaggtg ctgccaagga ccaggatgat ggagacgcca aagaagaaga caagtcgcat 180
gttccagacg tccaaaacgg ggtccttqtc ataaccatgg gagtctgggt tcttctcata 240
caaqttttcq teeteqqqtt etqqqteete ttqecaeqqt qtqqteqqtt etqqqqgeeq 300
ctttcccqcc acaqcqqacq qgqcgaccac agtcctggag aagctagatt cccagcggac 360
gegggeggee gggageete gegtegeege tgeegeeaaa agaeggegag egeteaaace 420
aaacaqccca qccqccatqa caqatqqtqc ttqcagqgqt cqacqcgqcc gcgaattc 478
<210> 98
<211> 159
<212> PRT
<213> Homo sapiens
<400> 98
Asn Ser Arg Pro Arg Pro Leu Gln Ala Pro Ser Val Met Ala Ala
                                    10
Gly Leu Phe Gly Leu Ser Ala Arg Arg Leu Leu Ala Ala Ala Thr
            20
                                25
Arg Gly Leu Pro Ala Ala Arg Val Arg Trp Glu Ser Ser Phe Ser Arg
                            40
Thr Val Val Ala Pro Ser Ala Val Ala Gly Lys Arg Pro Pro Glu Pro
                        55
Thr Thr Pro Trp Gln Glu Asp Pro Glu Pro Glu Asp Glu Asn Leu Tyr
                    70
                                                             80
                                        75
Glu Lys Asn Pro Asp Ser His Gly Tyr Asp Lys Asp Pro Val Leu Asp
                85
                                    90
                                                         95
Val Trp Asn Met Arg Leu Val Phe Phe Phe Gly Val Ser Ile Ile Leu
            100
                                105
                                                     110
Val Leu Gly Ser Thr Phe Val Ala Tyr Leu Pro Asp Tyr Arg Met Lys
        115
                            120
Glu Trp Ser Arg Arg Glu Ala Glu Arg Leu Val Lys Tyr Arg Glu Ala
                        135
                                            140
Asn Gly Leu Pro Ile Met Glu Ser Asn Cys Phe Asp Pro Gly Ser
145
                    150
                                        155
<210> 99
<211> 258
<212> DNA
<213> Homo sapiens
<400> 99
ggatcctgag tagggcaata tctccaggca gaagtcccgg aaatccaagc agcaggtgcc 60
aaggccagag cacgtcgggt ggcaggaaca tggcccgtcc agggcgccac agcgcatgga 120
```

gcagctctct tgggcatctg ctgtgggtcc ggggcccggg ccgagggctg tcgccagcag 180

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cagcagggcc cagggcagga gggctggctt catggtgcag cctgtgtctg cagccagcgt 240
 cgacgcggcc gcgaattc
                                                                   258
 <210> 100
 <211> 86
 <212> PRT
 <213> Homo sapiens
<400> 100
Glu Phe Ala Ala Ser Thr Leu Ala Ala Asp Thr Gly Cys Thr Met
Lys Pro Ala Leu Leu Pro Trp Ala Leu Leu Leu Ala Thr Ala Leu
             20
                                 25
Gly Pro Gly Pro Thr Ala Asp Ala Gln Glu Ser Cys Ser Met
                             40
Arg Cys Gly Ala Leu Asp Gly Pro Cys Ser Cys His Pro Thr Cys Ser
                         55
                                             60
Gly Leu Gly Thr Cys Cys Leu Asp Phe Arg Asp Phe Cys Leu Glu Ile
                                                             80
Leu Pro Tyr Ser Gly Ser
<210> 101
<211> 664
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (524)...(662)
<223> n = A, C, G or T
<400> 101
ggatccctga aagtgaaaca gaaagtacag catctgcacc aaattctcca agaacaccgt 60
taacacctcc gcctgcttct ggtgcttcca gtaccacaga tgtttgcagt gtatttgatt 120
ccgatcattc gagccctttt cactcaagca atgataccgt ctttatccaa gttactctgc 180
cccatggccc aagatctgct tctgtatcat ctataagttt aaccaaaggc actgatgaag 240
tgcctgtccc tcctcctgtt cctccacgaa gacgaccaga atctgcccca gcagaatctt 300
caccatctaa gattatgtct aagcatttgg acagtccccc agccattcct cctaggcaac 360
ccacatcaaa agcctattca ccacgatatt caatatcaga ccggacctct atctcagacc 420
ctcctgaaag ccctccctta ttaccaccac gaaggaaaaa aaacctggag cactgtgttc 480
taactaccat cattccacct cccctttggg caaaaaggac atgnaatgct tnttccaaca 540
ggccttgccc ttacaccact ctctnaacac tttctacgac aagangattg catacacatg 600
ccagaagggn ctcttcntgt ggcgctgtct cngaaagatt taattctact ctcaaactna 660
angg
                                                                  664
<210> 102
<211> 207
<212> PRT
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<213> Homo sapiens
 <220>
 <221> UNSURE
 <222> (1)...(43)
 <223> Xaa = any amino acid
<400> 102
Xaa Xaa Val Glu Asn Ile Phe Xaa Arg Gln Arg His Xaa Lys Xaa Pro
                                     10
Phe Trp His Val Tyr Ala Ile Xaa Leu Ser Lys Val Xaa Arg Glu Trp
                                 25
Cys Lys Gly Lys Ala Cys Trp Xaa Lys His Xaa Met Ser Phe Leu Pro
Lys Gly Glu Val Glu Trp Leu Glu His Ser Ala Pro Gly Phe Phe Ser
                         55
Phe Val Val Ile Arg Glu Gly Phe Gln Glu Gly Leu Arg Arg Ser
                                         75
Gly Leu Ile Leu Asn Ile Val Val Asn Arg Leu Leu Met Trp Val Ala
                                     90
Glu Glu Trp Leu Gly Asp Cys Pro Asn Ala Thr Ser Met Val Lys Ile
            100
                                 105
Leu Leu Gly Gln Ile Leu Val Val Phe Val Glu Glu Glu Glu Gly
        115
                             120
Gln Ala Leu His Gln Cys Leu Trp Leu Asn Leu Met Ile Gln Lys Gln
                         135
                                             140
Ile Leu Gly His Gly Ala Glu Leu Gly Arg Arg Tyr His Cys Leu Ser
145
                    150
                                         1.55
Glu Lys Gly Ser Asn Asp Arg Asn Gln Ile His Cys Lys His Leu Trp
                165
                                     170
Tyr Trp Lys His Gln Lys Gln Ala Glu Val Leu Thr Val Phe Leu Glu
                                 185
Asn Leu Val Gln Met Leu Tyr Phe Leu Phe His Phe Gln Gly Ser
        195
                            200
                                                 205
<210> 103
<211> 762
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (464)...(746)
<223> n = A, C, G or T
<400> 103
ggatcccact gcaagcccca ccaggcggta ggggaagaag caggaggcca ggaaggcagc 60
ccagagcgcc acatacagct tctgtgtgat ctccggctgg acccacatga acaagttctt 120
gatcttctcc aggatgtcag ccatcttccc gaaaaggttc tgggctttct gggcgacgtc 180
```

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cagcaccage tggaacttet cagacacagt caggtettee tttggaggtt ccaegggete 240
 agacacttcg ggcacgatgc tccactgtat ccgccacccc ctggcgatga ggtaattgag 300
 ggataacctc agaattgcta gaaataagaa caatgggatg gcccagccat gccacacggc 360
 attcatgtac acggtgaagg caatggcaga cgtgtagacg gagtaccagt cggataaggc 420
 agagaggttc ttcacaaagt tagtgaccgg cttttggggg gggnaccgct tgaccgctat 480
 ttttagtaac ctgcggcgct caggggttcc tnttgtctcc acagtgtctc ctcggctgga 540
 accgggaagt cettecacgt acttececga accggttegt aaaaccactt tttgcaggee 600
ccgaggacag gcccttggct tccgggngct tntgnttcca ttggntggcc tgggcctgc 660
 cctttttggg ggcttggttg annecatctg ctncttcggt tntgggcctt nancaccttc 720
 ttggaccntt ttggttcaag ttncantccg gccggttggc cq
 <210> 104
 <211> 253
 <212> PRT
 <213> Homo sapiens
<220>
<221> UNSURE
<222> (6)...(99)
<223> Xaa = any amino acid
<400> 104
Arg Pro Thr Gly Arg Xaa Xaa Thr Thr Lys Xaa Val Gln Glu Gly Xaa
Xaa Gly Pro Xaa Pro Lys Xaa Gln Met Xaa Ser Thr Lys Pro Pro Lys
                                 25
Arg Ala Gly Pro Arg Pro Xaa Asn Gly Xaa Xaa Ser Xaa Arg Lys Pro
Arg Ala Cys Pro Arg Gly Leu Gln Lys Val Val Leu Arg Thr Gly Ser
                         55
Gly Lys Tyr Val Glu Gly Leu Pro Gly Ser Ser Arg Gly Asp Thr Val
                    70
Glu Thr Xaa Gly Thr Pro Glu Arg Arg Leu Leu Lys Ile Ala Val
                85
Lys Arg Xaa Pro Pro Gln Lys Pro Val Thr Asn Phe Val Lys Asn Leu
            100
                                 105
                                                     110
Ser Ala Leu Ser Asp Trp Tyr Ser Val Tyr Thr Ser Ala Ile Ala Phe
                             120
                                                 125
Thr Val Tyr Met Asn Ala Val Trp His Gly Trp Ala Ile Pro Leu Phe
                        135
                                             140
Leu Phe Leu Ala Ile Leu Arg Leu Ser Leu Asn Tyr Leu Ile Ala Arg
                    150
                                         155
Gly Trp Arg Ile Gln Trp Ser Ile Val Pro Glu Val Ser Glu Pro Val
                165
                                     170
                                                         175
Glu Pro Pro Lys Glu Asp Leu Thr Val Ser Glu Lys Phe Gln Leu Val
            180
                                185
Leu Asp Val Ala Gln Lys Ala Gln Asn Leu Phe Gly Lys Met Ala Asp
                            200
                                                 205
Ile Leu Glu Lys Ile Lys Asn Leu Phe Met Trp Val Gln Pro Glu Ile
    210
                        215
                                            220
```

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Thr Gln Lys Leu Tyr Val Ala Leu Trp Ala Ala Phe Leu Ala Ser Cys
                                                             240
225
                    230
Phe Phe Pro Tyr Arg Leu Val Gly Leu Ala Val Gly Ser
                245
<210> 105
<211> 676
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (606)...(671)
<223> n = A, C, G or T
<400> 105
ggatccaggc atgagttctg tcctttgaac tccatagtga ccccttttta ccttgttcca 60
gatgaggaca ggtgtcggga ttccgatgac ctcacagctc aagtacacct gggcaccagt 120
gacattccag atgtccttgg ggggcgtcac tatggaagga ccttgctcgc aggtgccctt 180
gctgacctgg gtgatggcct tctccccgcg gctctcggcc ctctggctgg cggcgcgcag 240
ctggcagccg ctcgggtagg tggtgccgtc gctgccgcac accgggtagc ggctcttgca 300
cacqcacacq ccgcttacac ccqqaccqcc qqctqctqcc ccqqctttac ccttccqcct 360
cttqcqqctc ttcacqcact ccatqccqqq cqcqcaqtac cccctqccqq cqccqccacc 420
cccgcacggc tcgccctcgc cgcgggcgca catagggcag cagccgcacg cgtcgcgggt 480
ctequecage aggraged geggggeag gaggeggeag gaggeegget egeaggggee 540
gcaggtgtcc gaagaggagg aagaggagag gggcaggagc aggagcagca gcccagcggc 600
gccgangagc anggcgcgca acgacggccg cttcatggcg gggtgcggtg gcagcggtcn 660
                                                                   676
acncggccgc naatta
<210> 106
<211> 225
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (2)...(24)
<223> Xaa = any amino acid
<400> 106
Asn Xaa Arg Pro Xaa Xaa Pro Leu Pro Pro His Pro Ala Met Lys Arg
 1
                 5
                                    10
Pro Ser Leu Arg Ala Xaa Leu Xaa Gly Ala Ala Gly Leu Leu Leu
                                25
Leu Leu Pro Leu Ser Ser Ser Ser Ser Ser Asp Thr Cys Gly Pro Cys
                            40
Glu Pro Ala Ser Cys Pro Pro Leu Pro Pro Leu Gly Cys Leu Leu Gly
                        55
Glu Thr Arg Asp Ala Cys Gly Cys Cys Pro Met Cys Ala Arg Gly Glu
```

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65
                     70
                                         75
Gly Glu Pro Cys Gly Gly Gly Ala Gly Arg Gly Tyr Cys Ala Pro
                 85
                                     90
Gly Met Glu Cys Val Lys Ser Arg Lys Arg Lys Gly Lys Ala Gly
             100
                                 105
                                                     110
Ala Ala Gly Gly Pro Gly Val Ser Gly Val Cys Val Cys Lys Ser
                             120
Arg Tyr Pro Val Cys Gly Ser Asp Gly Thr Thr Tyr Pro Ser Gly Cys
                         135
Gln Leu Arg Ala Ala Ser Gln Arg Ala Glu Ser Arg Gly Glu Lys Ala
                     150
                                         155
Ile Thr Gln Val Ser Lys Gly Thr Cys Glu Gln Gly Pro Ser Ile Val
                165
                                     170
Thr Pro Pro Lys Asp Ile Trp Asn Val Thr Gly Ala Gln Val Tyr Leu
            180
                                 185
Ser Cys Glu Val Ile Gly Ile Pro Thr Pro Val Leu Ile Trp Asn Lys
                             200
                                                 205
Val Lys Arg Gly His Tyr Gly Val Gln Arg Thr Glu Leu Met Pro Gly
    210
                         215
                                             220
Ser
225
<210> 107
<211> 267
<212> DNA
<213> Homo sapiens
<400> 107
ggatcctgta gccgtgatgg tggctcgagg agcaatccag tgcacagtaa aagagttggc 60
agtaatatca gaaaagtcaa tgccagttgg ggaatcaaga cctgttttct gtcttcctct 120
aagaggtgtg ctctcatgtt gttcgtagac actggagaca ctcactacat attctgtacc 180
aggcaggaga tttgttaaga ccactgcatt gtctgaagga gaaattgaca actctgcaac 240
atcttccgtc gacgcggccg cgaattc
                                                                   267
<210> 108
<211> 89
<212> PRT
<213> Homo sapiens
<400> 108
Glu Phe Ala Ala Ser Thr Glu Asp Val Ala Glu Leu Ser Ile Ser
 1
Pro Ser Asp Asn Ala Val Val Leu Thr Asn Leu Leu Pro Gly Thr Glu
                                25
Tyr Val Val Ser Val Ser Ser Val Tyr Glu Gln His Glu Ser Thr Pro
                                                45
Leu Arg Gly Arg Gln Lys Thr Gly Leu Asp Ser Pro Thr Gly Ile Asp
                        55
Phe Ser Asp Ile Thr Ala Asn Ser Phe Thr Val His Trp Ile Ala Pro
```

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Arg Ala Thr Ile Thr Ala Thr Gly Ser
                 85
 <210> 109
 <211> 911
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> unsure
<222> (660)...(911)
<223> n = A, C, G or T
<400> 109
ggatccgcca gtgaggttgc gccagtaggc agggaagtcc tggaactgga aggtgtagac 60
ggcgatgagg accagcatgg tgtaggccac cacgagccac caqaaggcct tgagcagctt 120
ccgccacagg ctgtagtaga cctggaagag ggtgaggcag agcaggaaga ggaacatgta 180
gacaatcttg tagaccacga ggcggccggc gaagctgacc acgatgaaca tgccagcaca 240
cacatagate cagtacttgg cgtacacgee etteaceage tececeagge tetgeaacag 300
cgtctgcgtc cgcgtgggct ctgtgtctgc cacqqtgacc tccqtcaqcg caqctggaga 360
ctctgcccac ttcagcagct tctctttcac aaactggcgc agcaggagcc agaaggtcag 420
ggtgtagagc aacatggcac caaggtccag acaggggtag cgggtgtgct ccagcccag 480
ctggcgcagg ctgacgggc ccagggtggt gggcagctca gggcgcaggt ccatggccca 540
cacgtagcgt aggcagcaca gcgtcatccc atacagcagg atgcagggcg agcacagcat 600
ggccagttgg tggcggctgc gcaccgtcca gatgaggcag gccagagcag cagtacgaan 660
gtcagccagc tgtggtaggt gatgctncat accatcatgg caatgagcgc gcacacatag 720
ctttgggtcc atgatgangg gggcccaggc tggggaacgg aaacncctnc ctgggctanc 780
concttgggc ccacaggcon coccaggagg gaactttgnc cgtcaattct gcncaaagca 840
ttntnacctt cggggtcggg ngctggggna ccactgntgt aaantcccct tctggggccc 900
tqtncacntt n
                                                                   911
<210> 110
<211> 302
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(83)
<223> Xaa = any amino acid
<400> 110
Xaa Xaa Thr Gly Pro Gln Lys Gly Xaa Leu Xaa Gln Trp Xaa Pro Ser
Xaa Arg Pro Arg Xaa Xaa Cys Phe Xaa Gln Asn Arg Xaa Lys Phe
                                25
Pro Pro Gly Xaa Ala Cys Gly Pro Lys Xaa Xaa Ser Pro Gly Arg Xaa
        35
                            40
                                                45
```

80

65

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Phe Arg Ser Pro Ala Trp Ala Pro Xaa Ile Met Asp Pro Lys Leu Cys
Val Arq Ala His Cys His Asp Gly Met Xaa His His Leu Pro Gln Leu
                                         75
Ala Asp Xaa Arg Thr Ala Ala Leu Ala Cys Leu Ile Trp Thr Val Arg
                                     90
Ser Arg His Gln Leu Ala Met Leu Cys Ser Pro Cys Ile Leu Leu Tyr
                                 105
            100
                                                     110
Gly Met Thr Leu Cys Cys Leu Arg Tyr Val Trp Ala Met Asp Leu Arg
        115
                            .120
                                                 125
Pro Glu Leu Pro Thr Thr Leu Gly Pro Val Ser Leu Arg Gln Leu Gly
                         135
                                             140
Leu Glu His Thr Arg Tyr Pro Cys Leu Asp Leu Gly Ala Met Leu Leu
                    150
                                         155
Tyr Thr Leu Thr Phe Trp Leu Leu Leu Arg Gln Phe Val Lys Glu Lys
                165
                                     170
Leu Leu Lys Trp Ala Glu Ser Pro Ala Ala Leu Thr Glu Val Thr Val
            180
                                 185
                                                     190
Ala Asp Thr Glu Pro Thr Arg Thr Gln Thr Leu Leu Gln Ser Leu Gly
                             200
Glu Leu Val Lys Gly Val Tyr Ala Lys Tyr Trp Ile Tyr Val Cys Ala
                        215
                                             220
Gly Met Phe Ile Val Val Ser Phe Ala Gly Arg Leu Val Val Tyr Lys
                    230
                                         235
Ile Val Tyr Met Phe Leu Phe Leu Leu Cys Leu Thr Leu Phe Gln Val
                245
                                     250
                                                         255
Tyr Tyr Ser Leu Trp Arg Lys Leu Leu Lys Ala Phe Trp Trp Leu Val
                                 265
                                                     270
Val Ala Tyr Thr Met Leu Val Leu Ile Ala Val Tyr Thr Phe Gln Phe
        275
                            280
Gln Asp Phe Pro Ala Tyr Trp Arg Asn Leu Thr Gly Gly Ser
    290
                        295
                                             300
<210> 111
<211> 818
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (701)...(817)
<223> n = A, C, G, or T
<400> 111
ggatccaggc acaatgttgt cacaatagca aaaagcaaat tgtaggataa tacaatatag 60
aaatttccca gccaattaaa ccttccaaag tcgccaagta gatcaaatct agtgattccc 120
agtgttctcg acatcacagg cagagcagag ctcaaaacca agatggacac acaatttcca 180
atgatetttg teatagttgt gteatettte ttgggagtaa agttteeaaa aaategaagg 240
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ctatagaagc cgacaacaga ggacaccata agatagaaaa tcaaaatgat ttcaaqcgca 300

```
gctcccacaa aaccaaacgt agaaagagag gcatttccta ttccaggccc ccttgttcct 360
tttggcattq ctqtttcatc aaccaatagg caaagaatat tacaagccac caagaggacc 420
gagatggatg tctcaataag aaggagaacc ataacagcgg gatacaccaa atttctttcc 480
catgctgaag cettttttcg cetetetaat tttgtettaa gagtetttae attttcaagt 540
tcttgttcca actccattat gttgtattcc accgatgaag acagcccatt tagtcgtctc 600
tggagtgctt cttcctctaa ggtaatgata taaatttgtt catccaggtc ttcagaattg 660
ttggcttcac tagcaactga cccatcactg tgaactacga naaanggcaa ctggtgtacn 720
caaganaagt aacaacntcc atcatgattt caggatntaa tagggagatg nactnccana 780
atcatttaag atnctgcttg cggatcgttg gcatgang
<210> 112
<211> 254
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (8)...(38)
<223> Xaa = any amino acid
<400> 112
Ser Cys Gln Arg Ser Ala Ser Xaa Ile Leu Asn Asp Xaa Gly Ser Xaa
                                     10
                                                         15
Ser Pro Tyr Xaa Ile Leu Lys Ser Trp Xaa Leu Leu Leu Xaa Leu Xaa
                                 25
Thr Pro Val Ala Xaa Xaa Arg Ser Ser Gln Trp Val Ser Cys Ser Gln
                             40
Gln Phe Arg Pro Gly Thr Asn Leu Tyr His Tyr Leu Arg Gly Arg Ser
                        55
Thr Pro Glu Thr Thr Lys Trp Ala Val Phe Ile Gly Gly Ile Gln His
                    70
                                         75
Asn Gly Val Gly Thr Arg Thr Lys Cys Lys Asp Ser Asp Lys Ile Arg
Glu Ala Lys Lys Gly Phe Ser Met Gly Lys Lys Phe Gly Val Ser Arg
                                 105
                                                     110
Cys Tyr Gly Ser Pro Ser Tyr Asp Ile His Leu Gly Pro Leu Gly Gly
                            120
Leu Tyr Ser Leu Pro Ile Gly Asn Ser Asn Ala Lys Arg Asn Lys Gly
                        135
                                             140
Ala Trp Asn Arg Lys Cys Leu Ser Phe Tyr Val Trp Phe Cys Gly Ser
145
                    150
Cys Ala Asn His Phe Asp Phe Leu Ser Tyr Gly Val Leu Cys Cys Arg
                165
                                     170
Leu Leu Pro Ser Ile Phe Trp Lys Leu Tyr Ser Gln Glu Arg His Asn
            180
                                185
                                                     190
Tyr Asp Lys Asp His Trp Lys Leu Cys Val His Leu Gly Phe Glu Leu
                            200
                                                 205
Cys Ser Ala Cys Asp Val Glu Asn Thr Gly Asn His Ile Ser Thr Trp
                        215
Arg Leu Trp Lys Val Leu Ala Gly Lys Phe Leu Tyr Cys Ile Ile Leu
```

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225
                     230
                                          235
                                                              240
 Gln Phe Ala Phe Cys Tyr Cys Asp Asn Ile Val Pro Gly Ser
                 245
                                      250
<210> 113
<211> 905
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (708)...(900)
\langle 223 \rangle n = A, C, G or T
<400> 113
ggatccattg ggttttgggg ggaagaggaa gactgacggt cccccagga gttcaggtgc 60
tgggcacggt gggcatgtgt gagttttgtc acaagatttg ggctcaactc tcttgtccac 120
cttggtgttg ctgggcttgt gattcacgtt gcagatgtag gtctgggtgc ccaagctgct 180
ggagggcacg gtcaccacgc tgctgaggga gtagagtcct gaggactgta ggacagccgg 240
gaaggtgtgc acgccgctgg tcagggcgcc tgagttccac gacaccgtca ccggttcggg 300
gaagtagtcc ttgaccaggc agcccagggc cgctgtgccc ccagaggtgc tcttggagga 360
gggtgccagg gggaagaccg atgggccctt ggtggaggct gaggagacgg tgaccagggt 420
accetggece caetggtaac ttgtagecat etecgeaagt etegeacagt aatacatgge 480
ggtgtccgag gccttcaggc tgctccactg caggtaggcg gtactgatgg acttgtcgac 540
tgacatggtg acctggcctt ggaaggacgg gctgtatgtg gcatcagagt caccaggata 600
gatgatcccc atccactcca gacccttccc gggcatctgg cgcacccagg cgatccagta 660
actggagaag tagtatccag agcccttaca ggagatcttc agagactncc cgggcttttt 720
caccintggt ccagactgca cagctgcacc tcggacanac tccttggana acaaccagaa 780
ganggccagg atggcngctg acccctgatg ggganggaan aaatgaaccc tggtcaancg 840
gengnaattn anettaetnt tettttnatt aaaaaaetet tnaaaagena tnaaageatn 900
ccttc
                                                                    905
<210> 114
<211> 301
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (2)...(66)
<223> Xaa = any amino acid
<400> 114
Arg Xaa Ala Xaa Xaa Ala Phe Xaa Glu Phe Phe Asn Xaa Lys Xaa Ser
 1
                 5
Lys Xaa Asn Xaa Xaa Arg Leu Thr Arg Val His Xaa Phe Xaa Pro His
                                 25
Gln Gly Ser Ala Ala Ile Leu Ala Xaa Phe Trp Leu Xaa Ser Lys Glu
                            40
                                                 45
```

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Xaa Val Arg Gly Ala Ala Val Gln Ser Gly Pro Xaa Val Lys Lys Pro
Gly Xaa Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Tyr Phe Ser
                    70
                                       75
Ser Tyr Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu
                                   90
Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Ala Thr Tyr Ser Pro
            100
                               105
                                                   110
Ser Phe Gln Gly Gln Val Thr Met Ser Val Asp Lys Ser Ile Ser Thr
                            120
                                               125
Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr
                        135
Tyr Cys Ala Arg Leu Ala Glu Met Ala Thr Ser Tyr Gln Trp Gly Gln
                    150
                                       155
Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val
                165
                                   170
Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala
                               185
Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser
        195
                           200
Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val
                       215
                                           220
Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro
                    230
                                       235
Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys
                245
                                   250
                                                       255
Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys Ser Cys Asp
                               265
            260
                                                   270
Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly
                           280
Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Asn Gly Ser
    290
                       295
                                           300
<210> 115
<211> 458
<212> DNA
<213> Homo sapiens
<400> 115
ggatccggct ctgaccttct ccacgtcggc ccgggccgtc tggtaattgt ccacgctgcc 60
ccacctgccg gcagctgaca cgttgaccca caggcatggg tactggggca ccttcttgcc 180
cttcagctcc tcctggtccc tgatgttggt ctcaatcagg tggcacttgg attcctgggt 240
ccacacgett ttctggtaga ggggcagcac aqtcgtgacc aqqatqtaqt aqqtgatqac 300
ggcacacacc accatggtta cacccaggca aagggctcgt gtctctcccc gcttctgggc 360
catcaccage ttetteacca tatteactgg gggeagtgat catttagtet teeeggegte 420
```

ctgtgggtct tgagcagcgt cgacgcggcc qcgaattc

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<211> 151
<212> PRT
<213> Homo sapiens
<400> 116
Ile Arg Gly Arg Val Asp Ala Ala Gln Asp Pro Gln Asp Ala Gly Lys
Thr Lys Ser Leu Pro Pro Val Asn Met Val Lys Lys Leu Val Met Ala
                                 25
Gln Lys Arg Gly Glu Thr Arg Ala Leu Cys Leu Gly Val Thr Met Val
                             40
Val Cys Ala Val Ile Thr Tyr Tyr Ile Leu Val Thr Thr Val Leu Pro
                         55
Leu Tyr Gln Lys Ser Val Trp Thr Gln Glu Ser Lys Cys His Leu Ile
65
                    70
                                         75
Glu Thr Asn Ile Arg Asp Gln Glu Glu Leu Lys Gly Lys Lys Val Pro
                85
                                     90
Gln Tyr Pro Cys Leu Trp Val Asn Val Ser Ala Ala Gly Arg Trp Ala
            100
                                 105
                                                     110
Val Leu Tyr His Thr Glu Asp Thr Arg Asp Gln Asn Gln Gln Cys Ser
        115
                            120
Tyr Ile Pro Gly Ser Val Asp Asn Tyr Gln Thr Ala Arg Ala Asp Val
    130
                        135
                                             140
Glu Lys Val Arg Ala Gly Ser
145
                    150
<210> 117-
<211> 715
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (669)...(710)
<223> n = A, C, G or T
<400> 117
ggatcctgct tccaggcgct tctcattctc atggatcttc ttcacccqca qcttctqctt 60
ctcagtcaga aggttgttgt cctcatccct ctcatacagg gtgaccagga cgttcttgag 120
ccagtcccgc atgcgcaggg ggaattcggt cagctcagag tccaggcaag gggggatgta 180
tttgcaaggc ccgatgtagt ccaggtggag cttgtggccc ttcttggtgc cctccagggt 240
gcactttgtg gcaaagaagt ggcaggaaga gtcgaaggtc ttgttgtcat tgctgcacac 300
cttctcaaac tcgccaatgg gggctgggca gctggtgggg tcctggcaca cgcacatggg 360
ggtgttgttc tcatccagct cgcacacctt gccqtgtttq cagtqqtqqt tctqqcaqqq 420
attttccgcc accacctcct cttcggtttc ctctgcacca tcatcaaatt ctcctacttc 480
cacctggaca ggattagete ceacagatae etcagteace tetgecacag tttettecae 540
cacctetgte teateaggea gggettettg etgagggget gecaaggeee teeeggeeag 600
gcaaaggaga aagaagatcc aggccctcat ggtgctggga accctcagtg gcaggcaggc 660
aggeggeang cananegege teteegggea gtetggtega eneggeegen aatte
```

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<210> 118
<211> 238
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (2)...(16)
<223> Xaa = any amino acid
<400> 118
Asn Xaa Arg Pro Xaa Arg Pro Asp Cys Pro Glu Ser Ala Xaa Cys Xaa
Pro Pro Ala Cys Leu Pro Leu Arg Val Pro Ser Thr Met Arg Ala Trp
                                 25
Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu Ala Ala Pro Gln
Gln Glu Ala Leu Pro Asp Glu Thr Glu Val Val Glu Glu Thr Val Ala
                         55
Glu Val Thr Glu Val Ser Val Gly Ala Asn Pro Val Gln Val Glu Val
                    70
                                         75
Gly Glu Phe Asp Asp Gly Ala Glu Glu Thr Glu Glu Glu Val Val Ala
                85
                                     90
Glu Asn Pro Cys Gln Asn His His Cys Lys His Gly Lys Val Cys Glu
            100
                                 105
                                                      110
Leu Asp Glu Asn Asn Thr Pro Met Cys Val Cys Gln Asp Pro Thr Ser
                             120
                                                 125
Cys Pro Ala Pro Ile Gly Glu Phe Glu Lys Val Cys Ser Asn Asp Asn
                         135
Lys Thr Phe Asp Ser Ser Cys His Phe Phe Ala Thr Lys Cys Thr Leu
                    150
                                         155
Glu Gly Thr Lys Lys Gly His Lys Leu His Leu Asp Tyr Ile Gly Pro
                165
                                     170
Cys Lys Tyr Ile Pro Pro Cys Leu Asp Ser Glu Leu Thr Glu Phe Pro
            180
                                 185
Leu Arg Met Arg Asp Trp Leu Lys Asn Val Leu Val Thr Leu Tyr Glu
                             200
                                                 205
Arg Asp Glu Asp Asn Asn Leu Leu Thr Glu Lys Gln Lys Leu Arg Val
                        215
                                             220
Lys Lys Ile His Glu Asn Glu Lys Arg Leu Glu Ala Gly Ser
225
                    230
                                         235
<210> 119
<211> 467
<212> DNA
<213> Homo sapiens
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<400> 119

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ggatecettg tggteegeea eteegaggta teegteeagt ggeegeggte eegeggggae 60
cccqqqqcqc tgctqqqtqc tgctctccqc cgccqqctqc gagctqccqq tggccqacqc 120
ctgctgctgc tgttgctgct gctgctgctg ctgctgcggg ggccgctcct tctggccgcc 180
gaggetgetg tacactagea acaagetggt geacatggtg gtgagegeta aacacaetge 240
cagaccatgg cgcatcaggg tcttcatttt gggcacctct tttgtgcaga atcctcaggc 300
tcgcgcgtcc ggggccactt tttcctggag ggtttccatg atgggtaatg gggcggaggc 360
ggctctgatt tttgcccagc agccggccgc ggcagatcgc gcgcgggagc cgcgggaccc 420
gggaagcgcg gctgttgcag agattaggtc gacgcggccg cgaattc
<210> 120
<211> 154
<212> PRT
<213> Homo sapiens
<400> 120
Ile Arg Gly Arg Val Asp Leu Ile Ser Ala Thr Ala Ala Leu Pro Gly
                                    10
Ser Arg Gly Ser Arg Ala Arg Ser Ala Ala Ala Gly Cys Trp Ala Lys
                                 25
Ile Arg Ala Ala Ser Ala Pro Leu Pro Ile Met Glu Thr Leu Gln Glu
                                                 45
                            40
        35
Lys Val Ala Pro Asp Ala Arg Ala Gly Phe Cys Thr Lys Glu Val Pro
                        55
Lys Met Lys Thr Leu Met Arg His Gly Leu Ala Val Cys Leu Ala Leu
                    70
Thr Thr Met Cys Thr Ser Leu Leu Leu Val Tyr Ser Ser Leu Gly Gly
                                     90
                85
Gln Lys Glu Arg Pro Pro Gln Gln Gln Gln Gln Gln Gln Gln Gln
                                                     110
                                105
            100
Gln Gln Ala Ser Ala Thr Gly Ser Ser Gln Pro Ala Ala Glu Ser Ser
                            120
                                                 125
        115
Thr Gln Gln Arg Pro Gly Val Pro Ala Gly Pro Arg Pro Leu Asp Gly
                        135
                                             140
Tyr Leu Gly Val Ala Asp His Lys Gly Ser
145
                    150
<210> 121
<211> 859
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (28)...(857)
<223> n = A, C, G or T
```

<400> 121 ggatccacac acatcctcac cccacagnaa actgctggac acactgaaga aactgaataa 60

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aacagatgaa gaaataagca gttaaaaaaa taagtcgccc ctccaaaaca cgcccccatc 120
 ccacagcgct ccgcagcttc ccaccaccgc ccgcctcagt tcctttgcgt ctgttgcctc 180
 cccagccctg cacgccctgg ctggcactgt tgccgctgca ttctcgtgtt cagtgatgcc 240
 ctcttcttgt ttgaaacaaa agaaaataat gcattgtgtt ttttaaaaag agtatcttat 300
 acatgtatcc taaaaagaga agctcatgtg caattggtgc acagcaggag aaatttctgg 360
 actgttagga tgaatggacg ccttctcccc gttatttaag atttgtgacc ttgtacataa 420
 ccctgggtga cgtgcacatt gcttgggtat ggaacggtag aaatttgggt gtttttaaaa 480
 ccttgtttgg ggttgttcct gtccttgttg agaatcatag agatgtctgt gttcttggag 540
 tatticacac tgaggactaa tctgctatct tcattccagt ccctaccct cagtgcctgc 600
tctcatccaa ataacctggg aggtgacaat caggatatct caggaggtcc aaggtggaac 660
agacctcttt gcctttncca gcgtctcata ccccggtag tgcanctgtg ggtggaggct 720
ggggtgtctg caccaantca gggcagcgtc ctncttccna gcctgtactg gccccttccc 780
ancetgggte eccagggetg ggatececag ggantnette entttaanna aagggeeetg 840
acngggaaaa acaactncc
<210> 122
<211> 278
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(269)
<223> Xaa = any amino acid
<400> 122
Xaa Val Val Phe Pro Xaa Gln Gly Pro Xaa Xaa Lys Xaa Ser
                                     10
Leu Gly Ile Pro Ala Leu Gly Thr Gln Xaa Gly Lys Gly Pro Val Gln
                                25
Ala Xaa Lys Xaa Asp Ala Ala Leu Xaa Trp Cys Arg His Pro Ser Leu
His Pro Gln Xaa His Tyr Arg Gly Tyr Glu Thr Leu Xaa Lys Ala Lys
                                            60
Arg Ser Val Pro Pro Trp Thr Ser Asp Ile Leu Ile Val Thr Ser Gln
                    70
Val Ile Trp Met Arg Ala Gly Thr Glu Gly Gly Leu Glu Arg Gln Ile
Ser Pro Gln Cys Glu Ile Leu Gln Glu His Arg His Leu Tyr Asp Ser
            100
                                105
Gln Gln Glu Gln Pro Gln Thr Arg Phe Lys His Pro Asn Phe
                            120
                                                125
Tyr Arg Ser Ile Pro Lys Gln Cys Ala Arg His Pro Gly Leu Cys Thr
                        135
Arg Ser Gln Ile Leu Asn Asn Gly Glu Lys Ala Ser Ile His Pro Asn
145
                                        155
Ser Pro Glu Ile Ser Pro Ala Val His Gln Leu His Met Ser Phe Ser
                165
                                    170
Phe Asp Thr Cys Ile Arg Tyr Ser Phe Lys Thr Gln Cys Ile Ile Phe
                                185
                                                    190
```

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Phe Cys Phe Lys Gln Glu Glu Gly Ile Thr Glu His Glu Asn Ala Ala
                            200
        195
Ala Thr Val Pro Ala Arg Ala Cys Arg Ala Gly Glu Ala Thr Asp Ala
                        215
                                             220
Lys Glu Leu Arg Arg Ala Val Val Gly Ser Cys Gly Ala Leu Trp Asp
                    230
                                         235
Gly Gly Val Phe Trp Arg Gly Asp Leu Phe Phe Leu Leu Ile Ser Ser
                                     250
                245
Ser Val Leu Phe Ser Phe Phe Ser Val Ser Ser Ser Xaa Leu Trp Gly
                                                     270
                                 265
            260
Glu Asp Val Cys Gly Ser
        275
<210> 123
<211> 478
<212> DNA
<213> Homo sapiens
<400> 123
ggatccatca tatgtgtcta ctgtggggac aactggagtg aaaacttcgg ttgctggcag 60
gtccgtggga aaatcagtga ccagttcatc agattcatca gaatggtgag actcatcaga 120
ctggtgagaa tcatcagtgt catctacatc atcagagtcg tttgagtcaa tggagtcctg 180
gctgtccaca tggtcatcat catcttcatc atccatatca tccatgtggt catggctttc 240
gttggactta cttggaaggg tctgtggggc taggagattc tgcttctgag atgggtcagg 300
gtttagccat gtggccacag catctgggta tttgttgtaa agctgctttt cctcagaact 360
tccagaatca gcctgtttaa ctggtatggc acaggtgatg cctaggaggc aaaagcaaat 420
cactqqtcqa cqcqqcqcq aattcqcqqc cqcqtcqacq tcgacqcqcc gcgaattc
                                                                   478
<210> 124
<211> 159
<212> PRT
<213> Homo sapiens
<400> 124
Asn Ser Arg Arg Val Asp Val Asp Ala Ala Ala Asn Ser Arg Pro Arg
Arg Pro Val Ile Cys Phe Cys Leu Leu Gly Ile Thr Cys Ala Ile Pro
                                25
Val Lys Gln Ala Asp Ser Gly Ser Ser Glu Glu Lys Gln Leu Tyr Asn
                            40
Lys Tyr Pro Asp Ala Val Ala Thr Trp Leu Asn Pro Asp Pro Ser Gln
                        55
                                             60
Lys Gln Asn Leu Leu Ala Pro Gln Thr Leu Pro Ser Lys Ser Asn Glu
                    70
                                         75
Ser His Asp His Met Asp Asp Met Asp Asp Glu Asp Asp Asp His
                85
Val Asp Ser Gln Asp Ser Ile Asp Ser Asn Asp Ser Asp Asp Val Asp
                                                     110
                                105
Asp Thr Asp Asp Ser His Gln Ser Asp Glu Ser His His Ser Asp Glu
```

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115
                             120
                                                 125
Ser Asp Glu Leu Val Thr Asp Phe Pro Thr Asp Leu Pro Ala Thr Glu
                         135
                                             140
Val Phe Thr Pro Val Val Pro Thr Val Asp Thr Tyr Asp Gly Ser
145
                                         155
                     150
<210> 125
<211> 889
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> (743)...(888)
<223> n = A, C, G or T
<400> 125
ggatccqctt ttgtgtgcaa acaatggcaa acaatggcag caaaccacag cccagctgac 60
agccattaag atggagtatt catttgtcat ggtgggtaaa ggctcttcaa tagctgctaa 120
tcaaaataga gaaaaatgaa tgtatggcac gatgcaactc taataagact gggtgtccaa 180
atgagtgact ccacataggt atgcgtaagg cgtacatgga atgaccttct ctttgaactt 240
gctgccaccg tggagcagca tatctcctt gagaacttcc tcccttgact tccgaggaga 300
tettactete teatttetga eegacettte tttacettgt tetteceace cattecetca 360
atgagacagt cccccagcca ctgctctctg ttcaaattcc ctgcgtgact gatgccctgg 420
ggaagatccc ttctcctaaa tcttatgggg atttaagaat attacttgtc cagctgcagc 480
caaagtggac atggcattgg gacgcagatg tgcttgtgct tacctaaata ctcattctaa 540
agatggcaaa gactgggact ttcatgtatt catttccgac actctcattc ccagatactg 600
agctagaagc tggtgatgca gatacaagac tggtgttccc aaggaactta aaaaaccatc 660
ctccctgtca ctgtagtggc tgccatgggt tgactatacc aagtactctg ctaactgctt 720
tacttatgca atcccaccta atnctcacag caacccagtg aggnggctac taggataatt 780
ccttttcctt ttcctttttt ttttttttt anacqqattt nctnttqttq cccaqctqqa 840
ggcaangggc gaactcggtt actgaaaccc ctnctctngq qtnanccnt
                                                                   889
<210> 126
<211> 285
<212> PRT
<213> Homo sapiens
<220>
<221> UNSURE
<222> (1)...(47)
<223> Xaa = any amino acid
<400> 126
Xaa Xaa Thr Xaa Glu Xaa Gly Phe Gln Pro Ser Ser Pro Xaa Ala Ser
                                    10
Ser Trp Ala Thr Xaa Xaa Asn Pro Xaa Gln Lys Lys Lys Arg Lys
                                25
Arg Lys Arg Asn Tyr Pro Ser Ser Xaa Leu Thr Gly Leu Leu Xaa Leu
```

```
40
Gly Gly Ile Ala Val Lys Gln Leu Ala Glu Tyr Leu Val Ser Thr His
                        55
Gly Ser His Tyr Ser Asp Arg Glu Asp Gly Phe Leu Ser Ser Leu Gly
65
Thr Pro Val Leu Tyr Leu His His Gln Leu Leu Ala Gln Tyr Leu Gly
                                     90
Met Arg Val Ser Glu Met Asn Thr Lys Ser Gln Ser Leu Pro Ser Leu
                                105
Glu Val Phe Arg Ala Gln Ala His Leu Arg Pro Asn Ala Met Ser Thr
                            120
Leu Ala Ala Gly Gln Val Ile Phe Leu Asn Pro His Lys Ile Glu
                        135
Lys Gly Ser Ser Pro Gly His Gln Ser Arg Arg Glu Phe Glu Gln Arg
                                         155
                    150
Ala Val Ala Gly Gly Leu Ser His Gly Asn Gly Trp Glu Glu Gln Gly
                                    170
                165
Lys Glu Arg Ser Val Arg Asn Glu Arg Val Arg Ser Pro Arg Lys Ser
            180
                                185
Arg Glu Glu Val Leu Lys Gly Asp Met Leu Leu His Gly Gly Ser Lys
                                                 205
                            200
        195
Phe Lys Glu Lys Val Ile Pro Cys Thr Pro Tyr Ala Tyr Leu Cys Gly
    210
                        215
                                             220
Val Thr His Leu Asp Thr Gln Ser Tyr Ser Cys Ile Val Pro Tyr Ile
                    230
                                         235
His Phe Ser Leu Phe Leu Ala Ala Ile Glu Glu Pro Leu Pro Thr Met
                                    250
                245
Thr Asn Glu Tyr Ser Ile Leu Met Ala Val Ser Trp Ala Val Cys
            260
                                265
                                                     270
Cys His Cys Leu Pro Leu Phe Ala His Lys Ser Gly Ser
        275
                            280
                                                 285
<210> 127
<211> 339
<212> DNA
<213> Homo sapiens
<400> 127
ggatccctca acgccggtgg tttcttggtc ggtgggtgac tctgagccgt cggggcagac 60
gggacagcac tegecetegg ggaettegge geeggggeag ttettggtet egteacagat 120
cacgtcatcg cacaacacct tgccgttgtc gcagacgcag atccggcagg gctcgggttt 180
ccacacqtct cqqtcatqqt acctqaqqcc qttctqtacq caqqtqattq qtgqgatqtc 240
ttcgtcttgg ccctcgactt ggccttcctc ttggccgtgc gtcaggaggg cggtggccgc 300
taagaggagc aggagccgga gtcgacgcgg ccgcgaatt
                                                                   339
<210> 128
```

<211> 113 <212> PRT

<213> Homo sapiens

45

```
<400> 128
Asn Ser Arg Pro Arg Arg Leu Arg Leu Leu Leu Leu Ala Ala Thr
Ala Leu Leu Thr His Gly Gln Glu Gly Gln Val Glu Gly Gln Asp
                                 25
Glu Asp Ile Pro Pro Ile Thr Cys Val Gln Asn Gly Leu Arg Tyr His
                             40
Asp Arg Asp Val Trp Lys Pro Glu Pro Cys Arg Ile Cys Val Cys Asp
                         55
Asn Gly Lys Val Leu Cys Asp Asp Val Ile Cys Asp Glu Thr Lys Asn
Cys Pro Gly Ala Glu Val Pro Glu Gly Glu Cys Cys Pro Val Cys Pro
Asp Gly Ser Glu Ser Pro Thr Asp Gln Glu Thr Thr Gly Val Glu Gly
                                 105
Ser
<210> 129
<211> 537
<212> DNA
<213> Homo sapiens
<400> 129
ggatccatag cagggggctg ggcgctggtt gggcccaaag agatgcaagt cgccgtattc 60
ccatagaaac agctgagtca tcagggctcc gaagcccaca accgccagaa tgaggaccag 120
caggacccag cgggctttct tttccgcagc cttccacgcc tcaatctcat tcatgggcag 180
ctcattggcg ggctcctctg caggcacctt cagctcctgg tacatcagtt taggcttcat 240
cttccctcaa ggctgggga tacgcagagc ccaggtgaga aggtgggtgt gtcagggtct 300
ccaaaccctg aggggcctcg gcctcgctct caggcgtctg ctgctacctc cgctgggccc 360
cagettetgt etggacagge tgaacgaggg tgggaggagg gggeggggee tgtgggaget 420
ccgcccactg cagcgggag tctgcgcagt gcgtgcccca gtccgggctc accgcagcga 480
gaagegggge teggeteece agacaeggte getecaggte gaegeggeeg egaatte
<210> 130
<211> 176
<212> PRT
<213> Homo sapiens
<400> 130
Glu Phe Ala Ala Ala Ser Thr Trp Ser Asp Arg Val Trp Gly Ala Glu
Pro Arg Phe Ser Leu Arg Ala Arg Thr Gly Ala Arg Thr Ala Gln Thr
            20
                                25
Pro Arg Cys Ser Gly Arg Ser Ser His Arg Pro Arg Pro Leu Leu Pro
        35
                            40
Pro Ser Phe Ser Leu Ser Arg Gln Lys Leu Gly Pro Ser Gly Gly Ser
                        55
                                            60
```

```
Ser Arg Arg Leu Arg Ala Arg Pro Arg Pro Leu Arg Val Trp Arg Pro
 65
                                          75
 His Thr His Leu Leu Thr Trp Ala Leu Arg Ile Pro Gln Pro Gly Lys
                                      90
 Met Lys Pro Lys Leu Met Tyr Gln Glu Leu Lys Val Pro Ala Glu Glu
             100
                                  105
 Pro Ala Asn Glu Leu Pro Met Asn Glu Ile Glu Ala Trp Lys Ala Ala
         115
                              120
                                                  125
 Glu Lys Lys Ala Arg Trp Val Leu Leu Val Leu Ile Leu Ala Val Val
     130
                         135
                                              140
 Gly Phe Gly Ala Leu Met Thr Gln Leu Phe Leu Trp Glu Tyr Gly Asp
                     150
                                          155
Leu His Leu Phe Gly Pro Asn Gln Arg Pro Ala Pro Cys Tyr Gly Ser
                 165
                                      170
                                                           175
<210> 131
<211> 392
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (9)...(354)
\langle 223 \rangle n = A, C, G or T
<400> 131
gaatteggne agtggeeegn aggaatnegg neeeggggga acettteetg agattetgee 60
ccaggatgcc aactitgant nggatgaana ctacaacttg tncccttctc atctgcatct 120
ccctgctcca gctgatggtc ccagtgaata ctgatgagac catagagatt atcgtggaga 180
ataaggtcaa ggaacttctt gccaatccag ctaactatcc ctccactgta acgaanactc 240
tctcttgcac tagtgtcaag actatgaaca gatgggcctc ctgccctgct gggatgactg 300
ctactgggtg tgcttgtggc tttgcctgtg gatcttggga gatccagagt gganatactt 360
gcaactgcct gtgcttactc ctgactggat cc
                                                                    392
<210> 132
<211> 130
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (3)...(118)
<223> Xaa = any amino acid
<400> 132
Ile Arg Xaa Val Ala Arg Arg Asn Xaa Xaa Pro Gly Glu Pro Phe Leu
Arg Phe Cys Pro Arg Met Pro Thr Leu Xaa Xaa Met Xaa Thr Thr
                                 25
                                                      30
```

```
Cys Xaa Leu Leu Ile Cys Ile Ser Leu Leu Gln Leu Met Val Pro Val
 Asn Thr Asp Glu Thr Ile Glu Ile Ile Val Glu Asn Lys Val Lys Glu
Leu Leu Ala Asn Pro Ala Asn Tyr Pro Ser Thr Val Thr Xaa Thr Leu
                     70
                                          75
Ser Cys Thr Ser Val Lys Thr Met Asn Arg Trp Ala Ser Cys Pro Ala
                 85
                                      90
Gly Met Thr Ala Thr Gly Cys Ala Cys Gly Phe Ala Cys Gly Ser Trp
             100
                                 105
Glu Ile Gln Ser Gly Xaa Thr Cys Asn Cys Leu Cys Leu Leu Leu Thr
                             120
Gly Ser
     130
<210> 133
<211> 455
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (409)...(409)
<223> n = A, C, G or T
<400> 133
gaattcgcgg ccgcgtcgac ggaaaggtca agctggttcc aaatactaaa atacagatgt 60
catattcggt aaaatggaaa aaatcggatg taaaatttga agatcgattc gataaatatc 120
ttgatccatc ctttttcag cataggattc actggttttc aatttttaat tccttcatga 180
tggtgatctt cttagtggga ttagtttcaa tgattttaat gagaacttta aggaaagatt 240
atgcccgata cagtaaagaa gaagaaatgg atgacatgga cagagaccta ggagacgagt 300
atggctggaa gcaggtgcat ggagatgtgt tcagaccgtc aagtcaccct ctgatcttct 360
cctccctcat tggctctgga tgtcagatat ttgctgtgtc tctcattgnt attattgttg 420
ccatgataga ggacttatat acagagatgg gatcc
                                                                    455
<210> 134
<211> 455
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (409)...(409)
\langle 223 \rangle n = A, C, G or T
<400> 134
gaattcgcgg ccgcgtcgac ggaaaggtca agctggttcc aaatactaaa atacagatgt 60
catattcggt aaaatggaaa aaatcggatg taaaatttga agatcgattc gataaatatc 120
ttgatccatc cttttttcag cataggattc actggttttc aatttttaat tccttcatga 180
```

```
tggtgatctt cttagtggga ttagtttcaa tgattttaat gagaacttta aggaaagatt 240
atgcccgata cagtaaagaa gaagaaatgg atgacatgga cagagaccta ggagacgagt 300
atggctggaa gcaggtgcat ggagatgtgt tcagaccgtc aagtcaccct ctgatcttct 360
cctccctcat tggctctgga tgtcagatat ttgctgtgtc tctcattgnt attattgttg 420
ccatgataga ggacttatat acagagatgg gatcc
                                                                    455
<210> 135
<211> 151
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (136)...(136)
<223> Xaa = any amino acid
<400> 135
Ile Arg Gly Arg Val Asp Gly Lys Val Lys Leu Val Pro Asn Thr Lys
Ile Gln Met Ser Tyr Ser Val Lys Trp Lys Lys Ser Asp Val Lys Phe
                                 25
Glu Asp Arg Phe Asp Lys Tyr Leu Asp Pro Ser Phe Phe Gln His Arg
                             40
Ile His Trp Phe Ser Ile Phe Asn Ser Phe Met Met Val Ile Phe Leu
                         55
Val Gly Leu Val Ser Met Ile Leu Met Arq Thr Leu Arq Lys Asp Tyr
                                         75
Ala Arg Tyr Ser Lys Glu Glu Glu Met Asp Asp Met Asp Arg Asp Leu
                                     90
Gly Asp Glu Tyr Gly Trp Lys Gln Val His Gly Asp Val Phe Arg Pro
            100
                                 105
                                                     110
Ser Ser His Pro Leu Ile Phe Ser Ser Leu Ile Gly Ser Gly Cys Gln
                            120
                                                 125
Ile Phe Ala Val Ser Leu Ile Xaa Ile Ile Val Ala Met Ile Glu Asp
                        135
Leu Tyr Thr Glu Met Gly Ser
145
                    150
<210> 136
<211> 490
<212> DNA
<213> Mus musculus
<400> 136
gaattcgcgg ccgcgtcgac ccaaatccat cactgtcttc tttaaagaga tagaagttat 60
attcagtgca acgaccagtg aagtatcatg gatatcatct ataatgttgg ctgtcatgta 120
tgctggaggt cctatcagca gtatcttggt gaataaatac ggcagccgtc cagtaatgat 180
cgctggtggt tgtctgtctg gttgcggctt gatcgcagct tctttctgta acacagtaca 240
ggaactttac ttgtgcattg gtgttattgg aggtcttggg cttgctttca acttgaaccc 300
```

```
agetetgaet atgattggea agtattteta caagaagega eeactggeea aeggaetgge 360
 catggcaggc agccctgtgt tcctctctac cctggctcca cttaatcagg ctttctttga 420
 tatttttgac tggagaggaa gcttcctaat tcttgggggc ctcctcctaa attgttgtgt 480
 agctggatcc
                                                                    490
 <210> 137
 <211> 163
 <212> PRT
 <213> Mus musculus
<400> 137
Asn Ser Arg Pro Arg Pro Lys Ser Ile Thr Val Phe Phe Lys Glu
                                     10
                                                          15
Ile Glu Val Ile Phe Ser Ala Thr Thr Ser Glu Val Ser Trp Ile Ser
             20
                                 25
Ser Ile Met Leu Ala Val Met Tyr Ala Gly Gly Pro Ile Ser Ser Ilè
                             40
                                                  45
Leu Val Asn Lys Tyr Gly Ser Arg Pro Val Met Ile Ala Gly Gly Cys
Leu Ser Gly Cys Gly Leu Ile Ala Ala Ser Phe Cys Asn Thr Val Gln
                     70
                                         75
                                                              80
Glu Leu Tyr Leu Cys Ile Gly Val Ile Gly Gly Leu Gly Leu Ala Phe
               85
                                     90
Asn Leu Asn Pro Ala Leu Thr Met Ile Gly Lys Tyr Phe Tyr Lys Lys
                                 105
                                                      110
Arg Pro Leu Ala Asn Gly Leu Ala Met Ala Gly Ser Pro Val Phe Leu
                             120
                                                 125
Ser Thr Leu Ala Pro Leu Asn Gln Ala Phe Phe Asp Ile Phe Asp Trp
                         135
                                             140
Arg Gly Ser Phe Leu Ile Leu Gly Gly Leu Leu Leu Asn Cys Cys Val
145
                    150
                                         155
                                                             160
Ala Gly Ser
<210> 138
<211> 358
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (18)...(18)
<223> n = A, C, G or T
<400> 138
gaattcgcgg ccgctttnga cgcggcggcg gcggccgagc tggtgatcgg ctggtgcatc 60
ttcggcctct tgctcctggc tattttggcc ttttgctggg tctacgttcg gaagtaccag 120
agtcagcggg aaagtgaggt cgtctccact gtgacagcca ttttttcact ggctgttgct 180
ctgatcacat cagcactgct gccggtggat atatttttgg tttcttacat gaaaaatcaa 240
```

```
aatggcacat tcaaggactg ggctgacgcc aatgtcaccg tacagattga gaataccgtt 300
ctgtatggct actatactct gtattctgtc attctcttct gtgtgttctt ctggatcc
<210> 139
<211> 356
<212> DNA
<213> Mus musculus
<400> 139
gagccagggc aatacagaaa aaaaacaaac aaacaaacaa aatgtagtgt aaagtggcct 120
gtggttctgc tgttaaagac aggttctttc atatttctca gtctagaagt cagcagtgta 180
attgtgataa tttcatattt ggaaacctaa gtgaaacttg gtgcatgata tttattcttc 240
aaaatgcagg taagctgatg gccatatctg tctggatatg gtttgttctt tagactgagc 300
ctctgtggtt tgctaactgg gtacatgttt tattgacagc aatatgttta ggatcc
<210> 140
'<211> 115
<212> PRT
<213> Mus musculus
<400> 140
Ile Arg Gly Arg Val Asp Val Phe Cys Phe Leu Phe Leu Cys Leu Phe
                                   10
Leu Phe Phe Ala Arg Ala Ile Gln Lys Lys Asn Lys Gln Thr Asn Lys
            20
                               25
                                                   30
Met Cys Lys Val Ala Cys Gly Ser Ala Val Lys Asp Arg Phe Phe His
        35
                           40.
                                               45
Ile Ser Gln Ser Arg Ser Gln Gln Cys Asn Cys Asp Asn Phe Ile Phe
                       .55
                                           60
Gly Asn Leu Ser Glu Thr Trp Cys Met Ile Phe Ile Leu Gln Asn Ala
                   70
                                       75
Gly Lys Leu Met Ala Ile Ser Val Trp Ile Trp Phe Val Leu Thr Glu
                                   90
Pro Leu Trp Phe Ala Asn Trp Val His Val Leu Leu Thr Ala Ile Cys
           100
                                                   110
Leu Gly Ser
       115
<210> 141
<211> 300
<212> DNA
<213> Mus musculus
<400> 141
gaattcgcgg ccgcgtcgac ggacacttaa gagaagtata ttaaatctga tcttgctatg 60
tatcttttta aaatatagta ttaacatact aatataatgc taattgaaaa attaaagtac 120
atttatttgt gtacatgtgt gtgcatatac gcgtgtgcca tggtgtgcgt gtggagagca 180
ggggacagct tgccatagct ggctctctac tgccatgaca tgggtcttag ggatcgagtt 240
```

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<210> 142
 <211> 96
 <212> PRT
 <213> Mus musculus
<400> 142
Glu Phe Ala Ala Ala Ser Thr Asp Thr Glu Lys Tyr Ile Lys Ser Asp
                                     10
Leu Ala Met Tyr Leu Phe Lys Ile Tyr His Thr Asn Ile Met Leu Ile
             20
                                 25
Glu Lys Leu Lys Tyr Ile Tyr Leu Cys Thr Cys Val Cys Ile Tyr Ala
         35
                             40
Cys Ala Met Val Cys Val Trp Arg Ala Gly Asp Ser Leu Pro Leu Ala
                                             60
Leu Tyr Cys His Asp Met Gly Leu Arg Asp Arg Val His Ala Thr Arg
                                         75
Leu His Val Thr Gly Leu Pro Gly Pro Val Asn Ile Leu Lys Gly Ser
                 85
                                     90
<210> 143
<211> 897
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (580)...(896)
<223> n = A, C, G or T
<400> 143
gaattcgcgg ccgcgtcgac ggactttggt tctctagggt gacatttcct tcccattgcc 60
atgtaggggt cagtggtgg cagtcgcttg tggacttaac taagtttaaa ttaaaaaaat 120
gattttttt gtttttaa attaaaagac attattttgt gtgaggggg aagaagagtg 180
tgaggttaga gccccataga tactaaacta gaagtcttgt ttataatagg ttgacactgg 240
caagttgtta atctctcagt ggtagtcttt ctatctctaa agtggtataa gtattgatgc 300
ttgtgttgag agtatttgct aggattagaa atcattggaa ataatgaatc aagataaaaa 360
atggcactgg aggtaggaag ctgagggcat agaatgtcac ggttctggga agttagttgg 420
aagctgagaa gttggtgata ttctggattt gctatactcg attttatctg cccatctctt 480
gattgacact ggcatacttg gcatatagac ttccaagaaa agatgttagc tattatggaa 540
ggagcattgt gtagagaccc tggagaaagg ggtagctctn caagtaggtt ctcaattaac 600
ataggtagag cggcgggtga cggccactgt gaactctttc ctatctactt attggtcctt 660
tageteteae eteaetteta cetteettaa eeegageaee eaggagtetg ntetteaaet 720
cttgagagaa gtaaaagatg gcttatgaaa antttantag ctgcacatag gaatgaaggt 780
gtgggctntg gaccngatga tgganattga atccctggcc ttactactat gggatttngg 840
taattaaatg gcttgggaac tgaaataatt ggggggtatg aggatanttt ganannt
                                                                   897
```

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<210> 144
<211> 357
<212> DNA
<213> Mus musculus
<400> 144
qaattcqcqq ccqcqtcqac qcqqcqqcqg cqqccqaqct qgtgatcqqc tggtgcatct 60
tcggcctctt gctcctggct attttggcct tttgctgggt ctacgttcgg aagtaccaga 120
gtcagcqqqa aaqtqaqqtc qtctccactq tqacagccat tttttcactq qctgttgctc 180
tgatcacatc agcactgctg ccggtggata tatttttggt ttcttacatg aaaaatcaaa 240
atggcacatt caaggactgg gctgacgcca atgtcaccgt acagattgag aataccgttc 300
tgtatggcta ctatactctg tattctgtca ttctcttctg tgtgttcttc tggatcc
<210> 145
<211> 115
<212> PRT
<213> Mus musculus
<400> 145
Glu Phe Ala Ala Ser Thr Arg Arg Arg Pro Ser Trp Ser Ala
                                    10
Gly Ala Ser Ser Ala Ser Cys Ser Trp Leu Phe Trp Pro Phe Ala Gly
                                25
Ser Thr Phe Gly Ser Thr Arg Val Ser Gly Lys Val Arg Ser Ser Pro
                            40
Leu Gln Pro Phe Phe His Trp Leu Leu Ser His Gln His Cys Cys
                        55
Arg Trp Ile Tyr Phe Trp Phe Leu Thr Lys Ile Lys Met Ala His Ser
                    70
                                        75
Arg Thr Gly Leu Thr Pro Met Ser Pro Tyr Arg Leu Arg Ile Pro Phe
                                    90
                85
Cys Met Ala Thr Ile Leu Cys Ile Leu Ser Phe Ser Ser Val Cys Ser
            100
                                105
                                                     110
Ser Gly Ser
        115
<210> 146
<211> 346
<212> DNA
<213> Mus musculus
<400> 146
gaattcgcgg ccgcgtcgac ctataatctg tctacctatc taaccaccat acatctatct 60
catctatata ttcatctata cacctattta agtatctatt gacctatgta gctactatgt 120
atctacccat gtgtctacct gtgtgtctat ttatcacata tctgtctgtc tgtctgtcta 180
tcatttgcct atctacttat ttacttagga aacaaacatg gagatgtttt tgttcaagtg 240
caaggatttt ataaaagcat ctataaaaat ctgtgtcatg gtctttgtcc tcattgatat 300
aggactgttt agtaccaqca cctqctatac tctaqccact qqatcc
                                                                   346
```

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<210> 147
 <211> 112
 <212> PRT
 <213> Mus musculus
 <400> 147
 Asn Ser Arg Pro Arg Pro Ile Ile Cys Leu Pro Ile Pro Pro Tyr
                                      10
 Ile Tyr Leu Ile Tyr Ile Phe Ile Tyr Thr Pro Ile Val Ser Ile Asp
                                 25
                                                      30
Leu Cys Ser Tyr Tyr Val Ser Thr His Val Ser Thr Cys Val Ser Ile
Tyr His Ile Ser Val Cys Leu Ser Val Tyr His Leu Pro Ile Tyr Leu
Phe Thr Glu Thr Asn Met Glu Met Phe Leu Phe Lys Cys Lys Asp Phe
                     70
                                         75
Ile Lys Ala Ser Ile Lys Ile Cys Val Met Val Phe Val Leu Ile Asp
                                     90
Ile Gly Leu Phe Ser Thr Ser Thr Cys Tyr Thr Leu Ala Thr Gly Ser
             100
                                 105
                                                      110
<210> 148
<211> 962
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (672)...(961)
\langle 223 \rangle n = A, C, G or T
<400> 148
gaattcgcgg ccgcgtcgac gtagactgtt tggcttgttt caaggattca gcaaatctct 60
gcaagttagt gctttgcatg gtgcctggcc catggtaaat aaatgtcctg gcaagttaaa 120
gtcttcagag ctctatatac atttgaaccc agaactccag atgaattata ctttgaagaa 180
ggagacatta totacatcac tgacatgagt gataccaget ggtggaaagg gacatgcaag 240
ggcagaacag gactgatccc gagcaactat gtggctgagc aggcagaatc cattgacaat 300
ccattgcatg aagctgcaaa aagaggcaac ctgagctggt tgagggagtg cttggacaac 360
cgggtgggtg tgaacggcct ggacaagct ggaagcacag ccctgtactg ggcctgccac 420
ggtggccata aagacatagt ggaggttctg tttactcagc ccgaatgtgg agctgaacca 480
gcagaataag ctgggagaca cagctctgca cgcggctgcc tggaagggtt atgcagacat 540
tgtccagttg ctactggcaa aaggtgcgag gacagacttg agaaacaatg agaagaagct 600
geettggaea tggeeaceaa egetgeetgt geategette tgaagaagaa geageaggga 660
acagatgggg cntcgaacgt taagcaacgc ccgaaggact tancttcgat gaccaaagac 720
ntcagactgg attcccccg ggggccggtt ttgaatggtt ggcctaaact ttcttttngc 780
ttttngncaa tttccgggaa ccctngggtt ggnttngncc cnaaaaaagt nnttggataa 840
ccnggtggcn tttttaaaag gtctgggatt gaaaccccga anacttggtt ggcacttggg 900
ggattcccaa ccccagaaaa acccttggtg naaaggtaaa aagnnagnct tgaaaaatcc 960
nt
                                                                   962
```

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<210> 149
<211> 296
<212> DNA
<213> Mus musculus
<400> 149
gaattcgcgg cccgcgtcga ctttttttt tttttgactg tcctaaattg tttattggat 60
atgaatttta caaatatcac gtgtattagc ggtaacggtg gagctggaga gtattgcgcc 120
ttctccaggc tgcacggcgg gaaccaccaa tagtgtggtg gaacttgtgg ccctttccaa 180
ggccacggct ctttcggcca gcagatgtca gcccacgcat ctctctgtgt ttgtggactg 240
gtttggtgat ccactgggtg tcaggatttc ttctgatagc tttatggaac ggatcc
<210> 150
<211> 67
<212> PRT
<213> Mus musculus
<400> 150
Arg Trp Ser Trp Arg Val Leu Arg Leu Leu Gln Ala Ala Arg Arg Glu
                                   10
Pro Pro Ile Val Trp Trp Asn Leu Trp Pro Phe Pro Arg Pro Arg Leu
                               25
Phe Arg Pro Ala Asp Val Ser Pro Arg Ile Ser Leu Cys Leu Trp Thr
                           40
Gly Leu Val Ile His Trp Val Ser Gly Phe Leu Leu Ile Ala Leu Trp
                       55
                                          60
Asn Gly Ser
65
<210> 151
<211> 356
<212> DNA
<213> Mus musculus
<400> 151
gagccagggc aatacagaaa aaaaacaaac aaacaaacaa aatgtagtgt aaagtggcct 120
gtggttctgc tgttaaagac aggttctttc atatttctca gtctagaagt cagcagtgta 180
attgtgataa tttcatattt ggaaacctaa gtgaaacttg gtgcatgata tttattcttc 240
aaaatgcagg taagctgatg gccatatctg tctggatatg gtttgttctt tagactgagc 300
ctctgtggtt tgctaactgg gtacatgttt tattgacagc aatatgttta ggatcc
                                                               356
<210> 152
<211> 669
<212> DNA
<213> Mus musculus
<400> 152
```

```
gaattegegg eeegegtega eetetetgtg aggagtgeag aaacatagtg tteaaaatge 60
ctgctgaaat gcaagcccct cagtggctcc tgctgctact ggttatcctg ccagccacag 120
gctcagaccc tgtgctctgc ttcacccagt atgaggagtc ctctggcagg tgcaaaggcc 180
tacttgggag agacatcagg gtagaagact gctgtctcaa cgctgcctat gccttccagg 240
agcatgatgg tggcctctgt caggcatgca ggtctccaca atggtcagca tggtccttat 300
gggggccctg ctcagttaca tgttctgagg ggtcccagct gcgacacagg cgctgtgtgg 360
gcagaggtgg tcagtgctct gagaatgtgg ctcctggaac tcttgagtgg cagctacagg 420
cctgtgagga ccagccatgc tgtccagaga tgggtggctg gtctgagtgg ggaccctggg 480
ggccttqctc tqtcacatqc tccaaaqqaa cccaqatccq tcaacqaqta tqtqataatc 540
ctgctcctaa gtgtgggggc cactgcccag gaagaggccc agcaatcaca ggccttgtga 600
cacccagaag acctgcccca cacatgggcc tgggcatcct ggggcccctg gagcccttgt 660
tcaggatcc
                                                                    669
<210> 153
<211> 220
<212> PRT
<213> Mus musculus
<400> 153
Glu Phe Ala Ala Arg Val Asp Leu Ser Val Arg Ser Ala Glu Thr Cys
                                     10
Ser Lys Cys Leu Leu Lys Cys Lys Pro Leu Ser Gly Ser Cys Cys Tyr
                                 25
Trp Leu Ser Cys Gln Pro Gln Ala Gln Thr Leu Cys Ser Ala Ser Pro
                             40
Ser Met Arg Ser Pro Leu Ala Gly Ala Lys Ala Tyr Leu Gly Glu Thr
Ser Gly Lys Thr Ala Val Ser Thr Leu Pro Met Pro Ser Arg Ser Met
                    70
                                         75
Met Val Ala Ser Val Arg His Ala Gly Leu His Asn Gly Gln His Gly
                85
                                     90
Pro Tyr Gly Gly Pro Ala Gln Leu His Val Leu Arg Gly Pro Ser Cys
            100
                                 105
                                                     110
Asp Thr Gly Ala Val Trp Ala Glu Val Val Ser Ala Leu Arg Met Trp
                            120
                                                 125
Leu Leu Glu Leu Leu Ser Gly Ser Tyr Arg Pro Val Arg Thr Ser His
                        135
Ala Val Gln Arg Trp Val Ala Gly Leu Ser Gly Asp Pro Gly Gly Leu
                    150
                                         155
                                                             160
Ala Leu Ser His Ala Pro Lys Glu Pro Arg Ser Val Asn Glu Tyr Val
                                     170
                                                         175
Ile Ile Leu Leu Ser Val Gly Ala Thr Ala Gln Glu Glu Ala Gln
            180
                                 185
Gln Ser Gln Ala Leu His Pro Glu Asp Leu Pro His Thr Trp Ala Trp
                            200
Ala Ser Trp Gly Pro Trp Ser Pro Cys Ser Gly Ser
    210
                        215
                                             220
```

```
<211> 179
<212> DNA
<213> Mus musculus
<400> 154
qaatteggge cegegggeae tteetettgt ggaatgttta aaaagttage etaetaaaga 60
aaacagtcga cttcttgtga aggttttgga gaaatatgta tcagttcgtt ttatttgggt 120
attcaataat atccttggtg ataatgctga ctccatggct tctgatccca caaggatcc
<210> 155
<211> 33
<212> PRT
<213> Mus musculus
<400> 155
Arg Phe Trp Arg Asn Met Tyr Gln Phe Val Leu Phe Gly Tyr Ser Ile
                                    10
Ile Ser Leu Val Ile Met Leu Thr Pro Trp Leu Leu Ile Pro Gln Gly
            20
                                25
Ser
<210> 156
<211> 889
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (1)...(203)
<223> n = A, C, G or T
<400> 156
nggggggccg ttccggncan angttggctc ccqttatatt qtnaaaactt qcqqcqaatq 60
gcttgccgtt cctcgngctt acggatngcc gttcccgatt gcagggctng ccttcatngc 120
ntcctgcgag tcttctgatt gaaaaggaag agtaagctga tttcccatgg ccaagnccac 180
ttctgtacct ggggtggctt ccntqqqttc ctqctqtcca qqcatttctq cttccaqcaa 240
ggcaqcccaa aggcaggtat gtcaagtggg atqccagagt cctcggtgga agagtgactt 300
gtcctagcct cctcctcctc ttgctgctca gcctagtggt ccagctagca aggaagtcca 360
ttgctgcttc tctctgacgc agacaccacc cactgtctgg agtgaagccg cctgcctttt 420
cttcctagag cactggttct caacaccctt tgggcgtcct atatccgata tcctgcatat 480
ccaatattta catgacgatt cacaacaggc gcaaaattac aggtatgaag tagcaacaaa 540
ataactttag ggttggggat caccacgaca tgaggaacca tgttaaagag tctcagcgat 600
aggeaggttg agaggegeea tettagaget atgaceagte agegagggee ttgeatacet 660
ccccgccaaa ggaagctcag ctcaggagtg ggaatattca aagaatttgg ccttttgagt 720
agtttagctt atcctgccat tagcagaaaa tattgactgg aggggtggat tcattctaca 780
tgttttaatt ttgaaaagta tctgtattgt gagcatatgt gtgtatcttt ggatgatttg 840
tgcgtatgat tgctggtgcc cacagagacc agcagagggc aatggatcc
                                                                   889
```

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<210> 157
<211> 54
<212> PRT
<213> Mus musculus
<400> 157
Leu Ile Leu Pro Leu Ala Glu Asn Ile Asp Trp Arg Gly Gly Phe Ile
                                                          15
                 5
                                     10
Leu His Val Leu Ile Leu Lys Ser Ile Cys Ile Val Ser Ile Cys Val
                                 25
            20
Tyr Leu Trp Met Ile Cys Ala Tyr Asp Cys Trp Cys Pro Gln Arg Pro
Ala Glu Gly Asn Gly Ser
    50
<210> 158
<211> 179
<212> DNA
<213> Mus musculus
<400> 158
qaattcaaaa aggaagagta agcttgaatt cgggacagcg gggagtcttg aggcgcaatg 60
gatggttttg cttttatttg tgtttgataa ccatagtcgg ttatggcgac tgctatggag 120
atgtaggcaa ggcagcctcc tgtgtgacat tcactgtaaa ccctggagat gctggatcc 179
<210> 159
<211> 59
<212> PRT
<213> Mus musculus
<400> 159
Ile Gln Lys Gly Arg Val Ser Leu Asn Ser Gly Gln Arg Gly Val Leu
                                     10
Arg Arg Asn Gly Trp Phe Cys Phe Tyr Leu Cys Leu Ile Thr Ile Val
                                 25
            20
Gly Tyr Gly Asp Cys Tyr Gly Asp Val Gly Lys Ala Ala Ser Cys Val
                             40
Thr Phe Thr Val Asn Pro Gly Asp Ala Gly Ser
                        55
<210> 160
<211> 215
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (7)...(37)
```

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<223> n = A, C, G or T
<400> 160
tgcttcncnc caagctttcc aggtgagaga taagggncac tcttggagtc aactttcacg 60
ggtcttgatt taaaaaggaa tcacaggtcc catatccatt acttttccta ttgttgagaa 120
caattttttt tcttttgaag atttatttat ttattttatg tgtatgcata cactatagct 180
atcttcagac tcaccagaag agggcacttg gatcc
                                                                    215
<210> 161
<211> 69
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (2)...(11)
<223> Xaa = any amino acid
<400> 161
Leu Xaa Xaa Lys Leu Ser Arg Glu Ile Arg Xaa Thr Leu Gly Val Asn
                                     10
Phe His Gly Ser Phe Lys Lys Glu Ser Gln Val Pro Tyr Pro Leu Leu
                                 25
                                                     30
Phe Leu Leu Arg Thr Ile Phe Phe Leu Leu Lys Ile Tyr Leu Phe
                            40
Ile Leu Cys Val Cys Ile His Tyr Ser Tyr Leu Gln Thr His Gln Lys
                        55
Arg Ala Leu Gly Ser
65
<210> 162
<211> 110
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (21)...(21)
<223> n = A, C, G or T
<400> 162
aggagcccag gagaatctga ncaatgagga aaaagatcat aaccatattt aagacattaa 60
acaaacaaat aattgtcttt atgcaaatag taacatcgcc agctggatcc
                                                                   110
<210> 163
<211> 34
<212> PRT
<213> Mus musculus
```

```
<220>
<221> UNSURE
<222> (28)...(28)
<223> Xaa = any amino acid
<400> 163
Ala Gly Asp Val Thr Ile Cys Ile Lys Thr Ile Ile Cys Leu Phe Asn
                                     10
Val Leu Asn Met Val Met Ile Phe Phe Leu Ile Xaa Gln Ile Leu Leu
                                 25
                                                     30
Gly Ser
<210> 164
<211> 311
<212> DNA
<213> Mus musculus
<400> 164
qaattcaqqc ccqcqqqqtt catqtaaqtq aaggtggagt agagccctga gccctggccg 60
gctgcgtgac tgtagtagga gccggagttc tgatggtcag cgtagtcgta ttgcgagcgg 120
gtgatgggcg ggtaggaggg gctgtagtga ggaaggttga aggggctgta ggagatctqt 180
tgcggggagt gctgctgctg ctcgctgtag tggctggggc tcagctgctc cgtcttgatg 240
tgcgttcgct gggactggcc tggctcgctg ctcagcgtgg tgagcgtgtg tgcctgctac 300
                                                                   311
tqtcaqqatc c
<210> 165
<211> 102
<212> PRT
<213> Mus musculus
<400> 165
Ile Gln Ala Arg Gly Val His Val Ser Glu Gly Gly Val Glu Pro Ala
                                    10
Leu Ala Gly Cys Val Thr Val Val Gly Ala Gly Val Leu Met Val Ser
                                 25
Val Val Leu Arg Ala Gly Asp Gly Arg Val Gly Gly Ala Val Val
                            40
Arg Lys Val Glu Gly Ala Val Gly Asp Leu Leu Arg Gly Val Leu Leu
                        55
Leu Leu Ala Val Val Ala Gly Ala Gln Leu Leu Arg Leu Asp Val Arg
                    70
                                         75
Ser Leu Gly Leu Ala Trp Leu Ala Ala Gln Arg Gly Glu Arg Val Cys
                                                         95
                                     90
                85
Leu Leu Ser Gly Ser
            100
```

```
<211> 113
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (1)...(24)
<223> Xaa = any amino acid
<400> 166
Xaa Val Ser Xaa Asn Ser Gly Xaa Xaa Arg Gly Val Xaa Leu Gly Leu
Arg Ser Val Ala Xaa Gly Phe Xaa Asp Thr Glu Val Thr Thr Pro Met
                                 25
Gly Thr Ala Glu Val Ala Pro Asp Thr Ser Pro Arg Ser Gly Pro Ser
                             40
                                                 45
Cys Trp His Arg Leu Val Gln Val Phe Gln Ser Lys Gln Phe Arg Ser
                                             60
                        55
Ala Lys Leu Glu Arg Leu Tyr Gln Arg Tyr Phe Phe Gln Met Asn Gln
                                         75
Ser Ser Leu Thr Leu Leu Met Ala Val Leu Val Leu Leu Met Ala Val
                                     90
Leu Leu Thr Phe His Ala Ala Pro Ala Gln Pro Gln Pro Ala Tyr Gly
            100
                                 105
                                                     110
Ser
<210> 167
<211> 248
<212> DNA
<213> Mus musculus
<400> 167
acatctctcg gaggaccatg ggctctggcg ggaagagagc cttcgagagg cggtagagat 60
tgcgaaggtt gaactggatg ctggtgttgg tgacgcgaag ctcgtggatg ttggtggagc 120
tgtcctgagg gcagatgtca ctctcgcctg agaatgggga cactgtgatg gtattcttca 180
gctcataaag tggcaagttg tctgaaatgc cgccatccac atagcgcacc ccttagaggc 240
taggatcc
                                                                    248
<210> 168
<211> 107
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (2)...(30)
<223> Xaa = any amino acid
```

```
<400> 168
Gly Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Ser Xaa Xaa
                                   10
Xaa Xaa Xaa Xaa Xaa Ser Xaa Xaa Leu Xaa Cys Xaa Xaa Ile Ser
Arg Arg Thr Met Gly Ser Gly Gly Lys Arg Ala Phe Glu Arg Arg Arg
                           40
Leu Arg Arg Leu Asn Trp Met Leu Val Leu Val Thr Arg Ser Ser Trp
                       55
Met Leu Val Glu Leu Ser Gly Gln Met Ser Leu Ser Pro Glu Asn Gly
                                      75
                   70
Asp Thr Val Met Val Phe Phe Ser Ser Ser Gly Lys Leu Ser Glu Met
               85
                                                      95
Pro Pro Ser Thr Arg Thr Pro Arg Leu Gly Ser
           100
                               105
<210> 169
<211> 420
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (46)...(63)
<223> n = A, C, G or T
<400> 169
nnnggatttt tccaagataa aactttattg gagacagcaa ggagtatact gaaagtgggg 120
gagccatgcc ttcattccat aactgcaatc agatgctctc ctctgagaga gagtgtgtgg 180
ggagccaagg tgagaagcag gtatgattca caccccaact gcttggagag tgcttatatg 240
acagtetttt tetegatttt atttttete agttetteaa cacacaettt ggetteattt 300
gggggaaaat taaacaaaag aacagaattt ccctccccca gagttactta tgaaatgaca 360
cagctgccct tttctttgaa gggattcttg tcttctggga ttccctttac cagaggatcc 420
<210> 170
<211> 140
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (16)...(21)
<223> Xaa = any amino acid
<400> 170
Glu Phe Ala Ala Ser Thr Phe Phe Phe Phe Phe Phe Phe Phe Xaa
 1
                                  10
                                                     15
```

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Phe Phe Phe Xaa Xaa Gly Phe Phe Gln Asp Lys Thr Leu Leu Glu Thr
            20
Ala Arg Ser Ile Leu Lys Val Gly Glu Pro Cys Leu His Ser Ile Thr
Ala Ile Arg Cys Ser Pro Leu Arg Glu Ser Val Trp Gly Ala Lys Val
                        55
Arg Ser Arg Tyr Asp Ser His Pro Asn Cys Leu Glu Ser Ala Tyr Met
                                        75
                    70
Thr Val Phe Phe Ser Ile Leu Phe Phe Leu Ser Ser Ser Thr His Thr
                                     90
Leu Ala Ser Phe Gly Gly Lys Leu Asn Lys Arg Thr Glu Phe Pro Ser
                                105
            100
Pro Arg Val Thr Tyr Glu Met Thr Gln Leu Pro Phe Ser Leu Lys Gly
                                                 125
                            120
Phe Leu Ser Ser Gly Ile Pro Phe Thr Arg Gly Ser
                                             140
                        135
    130
<210> 171
<211> 334
<212> DNA
<213> Mus musculus
<400> 171
qaattcqcqq ccgcgtcqac ggcggctccg gaggtgctgg agtcagacgt gtcaagttcg 60
ataacacttt tgaaaaacct ccaggagcag gtgagtatgt atgtctttta gaataaatca 120
gtcaggggtt aactttgact ttgtaagtct catccacaca ctttgatgat tcgaatacta 180
caaaattatc ttaggtgtaa aataaaagcc ttatatgcgc ttcatgaaag ttcaaaataa 240
ttcattcagc tcccaaagaa atacagaaag ctgtttttcc cccattcact tacttattta 300
                                                                   334
tttattttat ttagtcactt tacattccgg atcc
<210> 172
<211> 105
<212> PRT
<213> Mus musculus
<400> 172
Asn Ser Arg Pro Arg Arg Arg Leu Arg Arg Cys Trp Ser Gln Thr
Cys Gln Val Arg His Phe Lys Thr Ser Arg Ser Arg Val Cys Met Ser
                                                     30
                                 25
Phe Arg Ile Asn Gln Ser Gly Val Asn Phe Asp Phe Val Ser Leu Ile
His Thr Leu Phe Glu Tyr Tyr Lys Ile Ile Leu Gly Val Lys Lys Pro
                        55
Tyr Met Arg Phe Met Lys Val Gln Asn Asn Ser Phe Ser Ser Gln Arg
                                         75
Asn Thr Glu Ser Cys Phe Ser Pro Ile His Leu Leu Ile Tyr Leu Phe
                                     90
                85
Tyr Leu Val Thr Leu His Ser Gly Ser
```

100 105

```
<210> 173
<211> 648
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (11)...(43)
<223> n = A, C, G or T
<400> 173
tecacaqtae ntqeentaga ageettqqae etqeenqtee tentagqeea etteaqqete 60
agatgetace aatgttgtet cettgaacag agtetgagee ceetgecage teettettee 120
atttcctagg agcattgtgg gtgtgccagt ggatggctgg ctgacgtgtg gatagactga 180
atatttaggg agaaatcttt ttctagagag tttgtttaaa aactagccaa gcttaggtgg 360
caaccggaac aaagatggtc ccaagtgtag ggaggggtct gatgccttcc acgtggtttt 420
agetettatt ttatgattga ttgtteagta attectgeat taaccaagtg gagaetgaet 480
ttggaacaat ctaagtggat tattttagcg ggcttccctt tggctggggt catgctggct 540
caggtgtgga ttaaccacag tcacttcctc tcagccttgc tggactgtgg tggacgggat 600
cttagcaggg tgaaggcagc ccagatgatg agagaggcga ggggatcc
                                                             648
<210> 174
<211> 208
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (4)...(15)
<223> Xaa = any amino acid
<400> 174
Ser Thr Val Xaa Ala Xaa Glu Ala Leu Asp Leu Pro Val Leu Xaa Gly
                                 10
His Phe Arg Leu Arg Cys Tyr Gln Cys Cys Leu Leu Glu Gln Ser Leu
                             25
Ser Pro Leu Pro Ala Pro Ser Ser Ile Ser Glu His Cys Gly Cys Ala
                          40
Ser Gly Trp Leu Ala Asp Val Trp Ile Asp Trp Cys Val Ser Arg Trp
                      55
                                        60
Trp Trp Trp Val Tyr Gly Trp Met Asp Gly Trp Val Gly Glu Trp Met
                                     75
Asn Gly Val Gly Gly Arg Tyr Val Ile Gly Met Met Asp Arg Tyr Ile
                                 90
              85
Phe Arg Glu Lys Ser Phe Ser Arg Glu Phe Val Lys Leu Ala Lys Leu
```

```
110
                                105
            100
Arg Trp Gln Pro Glu Gln Arg Trp Ser Gln Val Gly Gly Val Cys Leu
                                                 125
                            120
Pro Arg Gly Phe Ser Ser Tyr Phe Met Ile Asp Cys Ser Val Ile Pro
                                            140
                        135
Ala Leu Thr Lys Trp Arg Leu Thr Leu Glu Gln Ser Lys Trp Ile Ile
                                        155
                    150
Leu Ala Gly Phe Pro Leu Ala Gly Val Met Leu Ala Gln Val Trp Ile
                                     170
                165
Asn His Ser His Phe Leu Ser Ala Leu Leu Asp Cys Gly Gly Arg Asp
                                185
            180
Leu Ser Arg Val Lys Ala Ala Gln Met Met Arg Glu Ala Arg Gly Ser
                            200
        195
<210> 175
<211> 619
<212> DNA
<213> Mus musculus
<400> 175
gaagtgaaag ttcgtccaag gcagcacaac tgcacttgtg tgttataaca gccagatcac 60
agctccctat gcggaccgag tcaccttctc atccagtggc atcacgttca gttctgtgac 120
ccggaaggac aatggagagt atacttgcat ggtctccgag gaaggtggcc agaactacgg 180
ggaggtcagc atccacctca ctgtgcttgt acctccatcc aagccgacga tcagtgtccc 240
ctcctctgtc accattggga acagggcagt gctgacctgc tcagagcatg atggttcccc 300
accetetgaa tatteetggt teaaggaegg gatateeatg ettacageag atgeeaagaa 360
aaccegggcc ttcatgaatt cttcattcac cattgatcca aagteggggg atetgatett 420
tgaccccgtg acagcctttg atagtggtga atactactgc caggcccaga atggatatgg 480
gacagccatg aggtcagagg ctgcacacat ggatgctgtg gagctgaatg tggggggcat 540
cgtggcagct gtcctggtaa cactgattct ccttggactc ttgatttttg gcgtctggtt 600
                                                                   619
tgcctatagc cacggatcc
<210> 176
<211> 205
<212> PRT
<213> Mus musculus
<400> 176
Lys Lys Phe Val Gln Gly Ser Thr Thr Ala Leu Val Cys Tyr Asn Ser
                                                         15
                                     10
 1
Gln Ile Thr Ala Pro Tyr Ala Asp Arg Val Thr Phe Ser Ser Gly
                                 25
Ile Thr Phe Ser Ser Val Thr Arg Lys Asp Asn Gly Glu Tyr Thr Cys
                             40
Met Val Ser Glu Glu Gly Gly Gln Asn Tyr Gly Glu Val Ser Ile His
Leu Thr Val Leu Val Pro Pro Ser Lys Pro Thr Ile Ser Val Pro Ser
                                         75
                     70
Ser Val Thr Ile Gly Asn Arg Ala Val Leu Thr Cys Ser Glu His Asp
```

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85
                                     90
Gly Ser Pro Pro Ser Glu Tyr Ser Trp Phe Lys Asp Gly Ile Ser Met
                                 105
                                                     110
            100
Leu Thr Ala Asp Ala Lys Lys Thr Arg Ala Phe Met Asn Ser Ser Phe
                             120
        115
Thr Ile Asp Pro Lys Ser Gly Asp Leu Ile Phe Asp Pro Val Thr Ala
                         135
                                             140
Phe Asp Ser Gly Glu Tyr Tyr Cys Gln Ala Gln Asn Gly Tyr Gly Thr
                    150
                                         155
Ala Met Arg Ser Glu Ala Ala His Met Asp Ala Val Glu Leu Asn Val
                165
                                     170
Gly Gly Ile Val Ala Ala Val Leu Val Thr Leu Ile Leu Leu Gly Leu
                                 185
Leu Ile Phe Gly Val Trp Phe Ala Tyr Ser His Gly Ser
                            200
<210> 177
<211> 542
<212> DNA
<213> Mus musculus
<400> 177
gaattcgcgg ccgcgtcgac caagcccaga tgttgctgag catgaacagc ctggaqtcgc 60
tgaatgcggg tgtacagcag aacaatactg agtcctttgc cgtcgctctc tgccatcttg 120
cagageteca tgcagaacag ggctgttttg cggctgctgg tgaagtatta aagcacttga 180
aggaccgatt tccacccaac agtcagcacg cccagttatg gatgctgtgt gatcaaaaaa 240
tacagtttga cagagcaatg aatgatggca aattccattt ggctgattca cttgttacag 300
qaatcacage gettaatgge atagaaggtg tatacaggaa ageagtegta etgeaggete 360
agaaccaaat gacagaggca cacaagctac tacagaagtt gctgacatac tgtcagaagt 420
taaaqaacac agaaatqqtc atcaqtqtcc tcctatcqqt qqcaqaqctq tactqqcqat 480
cttcqtcccc qaccatcqcc atqcctqtqc tcctqqaaqc tctqqccctc tccaaaqqat 540
                                                                   542
CC
<210> 178
<211> 180
<212> PRT
<213> Mus musculus
<400> 178
Ile Arg Gly Arg Val Asp Gln Ala Gln Met Leu Leu Ser Met Asn Ser
Leu Glu Ser Leu Asn Ala Gly Val Gln Gln Asn Asn Thr Glu Ser Phe
                                 25
Ala Val Ala Leu Cys His Leu Ala Glu Leu His Ala Glu Gln Gly Cys
Phe Ala Ala Gly Glu Val Leu Lys His Leu Lys Asp Arg Phe Pro
Pro Asn Ser Gln His Ala Gln Leu Trp Met Leu Cys Asp Gln Lys Ile
65
                    70
                                                             80
                                         75
```

```
Gln Phe Asp Arg Ala Met Asn Asp Gly Lys Phe His Leu Ala Asp Ser
                                    90
Leu Val Thr Gly Ile Thr Ala Leu Asn Gly Ile Glu Gly Val Tyr Arg
                                105
Lys Ala Val Val Leu Gln Ala Gln Asn Gln Met Thr Glu Ala His Lys
                            120
                                                 125
Leu Leu Gln Lys Leu Leu Thr Tyr Cys Gln Lys Leu Lys Asn Thr Glu
                                            140
                        135
Met Val Ile Ser Val Leu Leu Ser Val Ala Glu Leu Tyr Trp Arg Ser
                                                             160
                    150
                                        155
Ser Ser Pro Thr Ile Ala Met Pro Val Leu Leu Glu Ala Leu Ala Leu
                                    170
                165
Ser Lys Gly Ser
            180
<210> 179
<211> 640
<212> DNA
<213> Mus musculus
<400> 179
caagtcaatg tacaaaatgt ctggcaatgc ctcatttaaa attaaattgg tttattgaga 60
acagetattt ttgatatata acataaaqea aqacagaqee etqetataa cagetageag 120
aagatttttt ttttttaatt attggtacat attaccette aaatetgaga atttggacta 180
attgcaccaa agaaccctct aatttggtcc ctggcacatg cgtacctgtc aactttttt 240
cttttacaag acctgcatgc tgtcggccat cgccttctcc aatgtttttg agcactattt 300
qqqqqatqac atqaaaaqqq aaaacccacc tgtggaggac agcagtgatg aggatgacaa 360
aagaaaccca ggaaacttgt atgacaaggc aggtaaagtg aggaagcatg tgacagagca 420
agagaaacct gaagagggct tgggccccaa catcaaaagc attgtgacca tgctgatgct 480
catgeteetg atgatgtteg eggteeactg caegtgggte acaageaacg ectaeteeag 540
tccaagtgtg gtccttgcct cctacaatca tgatggtacc aggaatatat tagatgattt 600
tagagaagcg tacttttggc tgagacaaaa caccggatcc
                                                                   640
<210> 180
<211> 209
<212> PRT
<213> Mus musculus
<400> 180
Lys Ser Met Tyr Lys Met Ser Gly Asn Ala Ser Phe Lys Ile Lys Leu
Val Tyr Glu Gln Leu Phe Leu Met Cys Asn Val Lys Gln Asp Arg Ala
                                25
Leu Leu Ala Ala Gly Arg Arg Phe Phe Phe Phe Asn Tyr Trp Tyr Ile
                            40
Leu Pro Phe Lys Ser Glu Asn Leu Asp Leu His Gln Arg Thr Leu Phe
                        55
                                             60
Gly Pro Trp His Met Arg Thr Cys Gln Leu Phe Phe Tyr Lys Thr
65
                    70
                                        75
```

```
Cys Met Leu Ser Ala Ile Ala Phe Ser Asn Val Phe Glu His Tyr Leu
Gly Asp Asp Met Lys Arg Glu Asn Pro Pro Val Glu Asp Ser Ser Asp
                                 105
                                                     110
Glu Asp Asp Lys Arg Asn Pro Gly Asn Leu Tyr Asp Lys Ala Gly Lys
                             120
Val Arg Lys His Val Thr Glu Gln Glu Lys Pro Glu Glu Gly Leu Gly
                         135
Pro Asn Ile Lys Ser Ile Val Thr Met Leu Met Leu Met Leu Met
145
                     150
                                         155
Met Phe Ala Val His Cys Thr Trp Val Thr Ser Asn Ala Tyr Ser Ser
                                     170
Pro Ser Val Val Leu Ala Ser Tyr Asn His Asp Gly Thr Arg Asn Ile
                                 185
                                                     190
Leu Asp Asp Phe Arg Glu Ala Tyr Phe Trp Leu Arg Gln Asn Thr Gly
                             200
Ser
<210> 181
<211> 671
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (5)...(71)
<223> n = A, C, G or T
<400> 181
agccngttta tctttgggta canaaagccc actgattggt ttgtgttatt ttatatcaag 60
ctactgcact naagctgttt atctggttta ggagttctct ggtgaatttt agggtcactt 120
atatatacta tcatatcatc tgcaaatagt gatattittg acttcttctt tccaatttgt 180
atccccttga cctccttttg ttgtggaatt gctctggcta ggacttcaag tactatattg 240
aataggtggg gagaaagtgg cagcttgtct agtccctgat tttagtggga ttgcttccag 300
tttctatcca tttactttga tgttggctac tggtttgctg tagattgctt ttattatgtt 360.
caggtatggg ccttgaattc ctgatctttc caagactttt atcttgaatg ggtgttggat 420
tttgtcaaat gctttttccg catctaatga tcatgtggtt tttgtctttg agtttgcttt 480
tatagtggat tacaatgatg gatttccgta tattaaacca tccctqcatc cctqqqatqa 540
agtctacttg gtcatgatgg atgatcattt tgatgtgttc ttggatttgg tttgctagga 600
ttttattgag tatttttgca ttgatattca taagggaaat tggtctgaag ttctctatcc 660
ttgttggatc c
                                                                   671
<210> 182
<211> 212
<212> PRT
<213> Mus musculus
```

<220>

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<221> UNSURE
<222> (7)...(7)
<223> Xaa = any amino acid
<400> 182
Pro Val Tyr Leu Trp Val Xaa Lys Ala His Leu Val Cys Val Ile Leu
                                     10
Tyr Gln Ala Thr Ala Leu Lys Leu Phe Ile Trp Phe Arg Ser Ser Leu
                                 25
Val Asn Phe Arg Val Thr Tyr Ile Tyr Tyr His Ile Ile Cys Lys Tyr
                             40
Phe Leu Leu Ser Asn Leu Tyr Pro Leu Asp Leu Leu Leu Trp
                         55
Asn Cys Ser Gly Asp Phe Lys Tyr Tyr Ile Glu Val Gly Arg Lys Trp
                                         75
                                                             80
Gln Leu Val Ser Leu Ile Leu Val Gly Leu Leu Pro Val Ser Ile His
                                     90
                85
Leu Leu Cys Trp Leu Leu Val Cys Cys Arg Leu Leu Leu Cys Ser
                                 105
                                                     110
            100
Gly Met Gly Leu Glu Phe Leu Ile Phe Pro Arg Leu Leu Ser Met Gly
        115
                             120
                                                 125
Val Gly Phe Cys Gln Met Leu Phe Pro His Leu Met Ile Met Trp Phe
                        135
                                             140
Leu Ser Leu Ser Leu Leu Trp Ile Thr Met Met Asp Phe Arg Ile
                    150
                                         155
                                                             160
Leu Asn His Pro Cys Ile Pro Gly Met Lys Ser Thr Trp Ser Trp Met
                165
                                     170
Ile Ile Leu Met Cys Ser Trp Ile Trp Phe Ala Arg Ile Leu Leu Ser
                                 185
Ile Phe Ala Leu Ile Phe Ile Arg Glu Ile Gly Leu Lys Phe Ser Ile
                                                 205
        195
                             200
Leu Val Gly Ser
    210
<210> 183
<211> 637
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (23)...(99)
<223> n = A, C, G or T
<400> 183
aagtcaatgt acaaaatgtc tgncaatgcn tcatttaaaa ttaaattggt ttattgagac 60
agctgtttnt gatgtgtaac gtgaagcaag acagagccnt gttgtgagca gtggcagaag 120
attttttttt tttaattatt ggtacatatt acccttcaaa tctgagaatt tggactaatt 180
gcaccaaaga accetetaat ttggteeetg gcacatgegt acctgteaac tttttttett 240
```

```
ttacaagacc tgcatgctgt cggccatcgc cttctccaat gtttttgagc actatttggg 300
ggatgacatg aaaagggaaa acccacctgt ggaggacagc agtgatgagg atgacaaaag 360
aaacccagga aacttgtatg acaaggcagg taaagtgagg aagcatgtga cagagcaaga 420
gaaacctgaa gagggcttgg gccccaacat caaaagcatt gtgaccatgc tgatgctcat 480
gctcctgatg atgttcgcgg tccactgcac gtgggtcaca agcaacqcct actccagtcc 540
aagtgtggtc cttgcctcct acaatcatga tggtaccagg aatatattag atgattttag 600
agaaqcgtac ttttggctga qacaaaacac cggatcc
<210> 184
<211> 209
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (8)...(32)
<223> Xaa = any amino acid
<400> 184
Ser Gln Cys Thr Lys Cys Leu Xaa Met Xaa His Leu Lys Leu Asn Trp
                                     10
Phe Ile Glu Thr Ala Val Xaa Asp Val Arg Glu Ala Arg Gln Ser Xaa
                                 25
Val Val Ser Ser Gly Arg Arg Phe Phe Phe Phe Asn Tyr Trp Tyr Ile
                             40
Leu Pro Phe Lys Ser Glu Asn Leu Asp Leu His Gln Arg Thr Leu Phe
                         55
Gly Pro Trp His Met Arg Thr Cys Gln Leu Phe Phe Phe Tyr Lys Thr
                    70
                                         75
Cys Met Leu Ser Ala Ile Ala Phe Ser Asn Val Phe Glu His Tyr Leu
                85
                                     90
                                                         95
Gly Asp Asp Met Lys Arg Glu Asn Pro Pro Val Glu Asp Ser Ser Asp
            100
                                 105
                                                     110
Glu Asp Asp Lys Arg Asn Pro Gly Asn Leu Tyr Asp Lys Ala Gly Lys
                            120
                                                 125
Val Arg Lys His Val Thr Glu Gln Glu Lys Pro Glu Glu Gly Leu Gly
                        135
Pro Asn Ile Lys Ser Ile Val Thr Met Leu Met Leu Met Leu Leu Met
                    150
                                         155
                                                             160
Met Phe Ala Val His Cys Thr Trp Val Thr Ser Asn Ala Tyr Ser Ser
                165
                                     170
                                                         175
Pro Ser Val Val Leu Ala Ser Tyr Asn His Asp Gly Thr Arg Asn Ile
            180
                                 185
Leu Asp Asp Phe Arg Glu Ala Tyr Phe Trp Leu Arg Gln Asn Thr Gly
        195
                            200
                                                 205
Ser
```

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<211> 669
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (8)...(119)
<223> n = A, C, G or T
<400> 185
cgccccancc aanctgttcg ccaggctaaa ggcgcgcatg ccgacggcga gnatctcgtc 60
gtgacccatg ccgatgcntg cttgccnaat atcatggtga aaatggccgc tttttctgna 120
ttcatcgact gtggccggct gggtgtggcg gaccgctatc aggacatagc gttggctacc 180
cgtgatattg ctaagagctt ggcggcgaat gggctgaccg cttcctcgtg ctttacggta 240
tcgccgctcc cgattcgcag cgcatcgcct tctatcgcct tcttgacgag ttcttctgaa 300
ttgaaaaaga agagtaagct tgaattcgcg gccgcgtcga ccgcggctac aacctccgga 360
gcgatgcccg tggggggcct gttgccgctc ttcagtagcc ctgggggcgg cggcctgggc 420
agtggcctgg gcgggggct tggcggcggg aggaaggggt ctggccccgc tgccttccgc 480
ctcaccgaga agttcgtgct gctgctggtg ttcagcgcct tcatcacgct ctgcttcggg 540
gcaatcttct tcctgcctga ctcctccaag ctgctcagcg gggtcctgtt ccactccaac 600
cctgccttgc agccgccggc ggagcacaag cccgggctcg gggcgcgtgc ggaggatgcc 660
                                                                   669
gccggatcc
<210> 186
<211> 223
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (3)...(40)
<223> Xaa = any amino acid
<400> 186
Arg Pro Xaa Gln Xaa Val Arg Gln Ala Lys Gly Ala His Ala Asp Gly
                                    10
                                                         15
Glu Xaa Leu Val Val Thr His Ala Asp Ala Cys Leu Pro Asn Ile Met
                                25
Val Lys Met Ala Ala Phe Ser Xaa Phe Ile Asp Cys Gly Arg Leu Gly
                            40
Val Ala Asp Arg Tyr Gln Asp Ile Ala Leu Ala Thr Arg Asp Ile Ala
                        55
Lys Ser Leu Ala Ala Asn Gly Leu Thr Ala Ser Ser Cys Phe Thr Val
                                         75
                    70
Ser Pro Leu Pro Ile Arg Ser Ala Ser Pro Ser Ile Ala Phe Leu Thr
                                     90
Ser Ser Ser Glu Leu Lys Lys Lys Ser Lys Leu Glu Phe Ala Ala
                                                     110
                                105
Ser Thr Ala Ala Thr Thr Ser Gly Ala Met Pro Val Gly Gly Leu Leu
                            120
                                                 125
        115
```

```
Pro Leu Phe Ser Ser Pro Gly Gly Gly Leu Gly Ser Gly Leu Gly
                         135
Gly Gly Leu Gly Gly Gly Arg Lys Gly Ser Gly Pro Ala Ala Phe Arg
                     150
                                         155
Leu Thr Glu Lys Phe Val Leu Leu Val Phe Ser Ala Phe Ile Thr
                                     170
                165
Leu Cys Phe Gly Ala Ile Phe Phe Leu Pro Asp Ser Ser Lys Leu Leu
            180
                                 185
                                                     190
Ser Gly Val Leu Phe His Ser Asn Pro Ala Leu Gln Pro Pro Ala Glu
                                                 205
        195
                             200
His Lys Pro Gly Leu Gly Ala Arg Ala Glu Asp Ala Ala Gly Ser
                         215
                                             220
<210> 187
<211> 280
<212> DNA
<213> Mus musculus
<400> 187
gaattcgcgg ccgcgtcgac ctcagcttga tctactggac ttgatttgga aaaaaaagtt 60
ataactttca acaccaactt aaaatgtaat ttccttattt cataaggtgg gggaactgaa 120
attcatgatc tagaaggagc ttaaggtatt atctagggat agttcctccc ttttggggtt 180
gattcttata atactttctg taattttctc tataaatatt aatatgtatt tattgtgtgt 240
gggtatgcat atatatgtat gtatatatga atatggatcc
                                                                   280
<210> 188
<211> 217
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (3)...(37)
<223> Xaa = any amino acid
<400> 188
His Val Xaa Gly Asn Arg Ser Cys Arg Xaa Gly Xaa Gly Arg Xaa Ser
                                     10
Ile Arg Gly Ser Arg Pro Pro Xaa Leu Phe Ala Arg Xaa Lys Ala Arg
His Ala Arg Arg Xaa Arg Ser Ser Ser Val Thr His Gly Asp Ala Cys
                            40
Leu Pro Asn Ile Met Val Lys Met Ala Ala Phe Leu Asn Ser Ser Thr
                        55
Val Ala Gly Trp Val Trp Arg Pro Leu Ser Asp Ile Ala Leu Ala Thr
                    70
                                        75
Arg Asp Ile Ala Glu Glu Leu Gly Glu Trp Ala Asp Arg Phe Leu
                85
                                                         95
Val Leu Tyr Gly Ile Ala Ala Pro Asp Ser Gln Arg Ile Ala Phe Tyr
```

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100
                                 105
                                                     110
Arg Leu Leu Asp Glu Phe Phe Ile Glu Lys Gly Arg Val Ser Leu Asn
                             120
                                                 125
Ser Arg Pro Arg Pro Gln Leu Asp Leu Leu Asp Leu Ile Trp Lys
                         135
Lys Lys Leu Leu Ser Thr Pro Thr Asn Val Ile Ser Leu Phe His Lys
                     150
                                         155
Val Gly Glu Leu Lys Phe Met Ile Lys Glu Leu Lys Val Leu Ser Arg
                                     170
Asp Ser Ser Ser Leu Leu Gly Leu Ile Leu Ile Ile Leu Ser Val Ile
            180
                                 185
Phe Ser Ile Asn Ile Asn Met Tyr Leu Leu Cys Val Gly Met His Ile
        195
                             200
                                                 205
Tyr Val Cys Ile Tyr Glu Tyr Gly Ser
    210
                         215
<210> 189
<211> 479
<212> DNA
<213> Mus musculus
<400> 189
gaattcgcgg ccgcgtcgac gagattatga gtttttatgt taataatttc tgattttgta 60
tagattttag tcatcattaa ataaaactta cctagttatg tctcagttct caagaaagtc 120
tgaggaggca aagatgacta tcttctaatt ggttttgagg gattctcatt aatgtgtaac 180
ctttttgtta agctgccaag cctcacagat gagtgtgaag ctagagatgt tgaatcttgc 240
aggetgeatt accaattetg cateateate tagattttte etettatgte aatgateatt 300
tggaaattta ctggtgctgt cttaaaaggg aaatcatgtt taaggattca gataatagaa 360
tatttaaaaa ttttcaacag atatttcctt tgtgctctct atggacaggt tatttattta 420
tttactttct gttttgttct gatgtactta ctccatatgc ctggaaagtc cttggatcc 479
<210> 190
<211> 148
<212> PRT
<213> Mus musculus
<400> 190
Ile Arg Gly Arg Val Asp Glu Ile Met Ser Phe Tyr Val Asn Asn Phe
                                    10
Phe Cys Ile Asp Phe Ser His His Ile Lys Leu Thr Leu Cys Leu Ser
Ser Gln Glu Ser Leu Arg Arg Gln Arg Leu Ser Ser Asn Trp Phe Gly
                            40
Ile Leu Ile Asn Val Pro Phe Cys Ala Ala Lys Pro His Arg Val Ser
Arg Cys Ile Leu Gln Ala Ala Leu Pro Ile Leu His His Leu Asp
65
                    70
Phe Ser Ser Tyr Val Asn Asp His Leu Glu Ile Tyr Trp Cys Cys Leu
                85
                                    90
                                                         95
```

```
Lys Arg Glu Ile Met Phe Lys Asp Ser Asp Asn Arg Ile Phe Lys Asn
Phe Gln Gln Ile Phe Pro Leu Cys Ser Leu Trp Thr Gly Tyr Leu Phe
                             120
Ile Tyr Phe Leu Phe Cys Ser Asp Val Leu Thr Pro Tyr Ala Trp Lys
    130
                         135
                                             140
Val Leu Gly Ser
145
<210> 191
<211> 289
<212> DNA
<213> Mus musculus
<400> 191
gaattegegg cegegtegae gecaagaett cacacagtte tgattgteec agaageettg 60
cgtttgtcaa aacatgacaa tgagatatga aaacttccag aacttggagc gggaagagaa 120
aaaccaggag atgagaaatg gtgacaagaa aggaggaatg gagtctccaa agtttgctct 180
aatteettee cagteettee tgtggegeat eetetettgg acceaectee teetgttete 240
cctgggcctc agcctcctgc tactggtggt catctccgtg attggatcc
                                                                   289
<210> 192
<211> 95
<212> PRT
<213> Mus musculus
<400> 192
Asn Ser Arg Pro Arg Arg Gln Asp Phe Thr Gln Phe Leu Ser Gln
Lys Pro Cys Val Cys Gln Asn Met Thr Met Arg Tyr Glu Asn Phe Gln
                                25
Asn Leu Glu Arg Glu Glu Lys Asn Gln Glu Met Arg Asn Gly Asp Lys
Lys Gly Gly Met Glu Ser Pro Lys Phe Ala Leu Ile Pro Ser Gln Ser
    50
                        55
Phe Leu Trp Arg Ile Leu Ser Trp Thr His Leu Leu Leu Phe Ser Leu
65
                    70
                                        75
Gly Leu Ser Leu Leu Leu Val Val Ile Ser Val Ile Gly Ser
                                    90
                                                         95
<210> 193
<211> 658
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (24)...(152)
```

```
<400> 193
aaactgacgg catgatgagg acantatgac gaaagtaaag gttacaaaan gagctgagaa 60
cagctgggtc cagtgcgaag anacacggcc aggttggcaa anaggtgcag cggcacaggc 120
cgactcgnag ccgacatgaa ggatctacgc anccgactcg ggcagtaccg caacgaggtg 180
cacaccatgt tgggccagag cacagaggag atacgggcgc ggctctccac acacctgcgc 240
aagatgcgca agcgcttgat gcgggatgcc gaggatctgc agaagcgcct agcttgtgta 300
caaggcaggg gcacgcgagg gcgccgagcg cggtgtgagt gccatccgtg agcgcctggg 360
gcctctggtg gagcaaggtc gccagcgcac cgccaaccta ggcgctgggg ccgcccagcc 420
tctgcgcgat cgcgcccagg cttttggtga ccgcatccga gggcggctgg aggaagtggg 480
caaccaggcc cgtgaccgcc tagaggaggt gcgtgagcac atggaggagg tgcgctccaa 540
gatggaggaa ctctcgagtc ccagcatcag agcgcgtgga ccttttcccg cgtcccgcag 600
catgcaggtc tcccgtgtgc tggccgcgct gtgcggcatg ctactctgcg ccggatcc
<210> 194
<211> 215
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (7)...(49)
<223> Xaa = any amino acid
<400> 194
Asn Arg His Asp Glu Asp Xaa Met Thr Lys Val Lys Val Thr Lys Xaa
                                                         15
Ala Glu Asn Ser Trp Val Gln Cys Glu Xaa Thr Arg Pro Gly Trp Gln
                                 25
             20
Xaa Gly Ala Ala Gln Ala Asp Ser Xaa Pro Thr Arg Ile Tyr Ala
                                                 45
Xaa Asp Ser Gly Ser Thr Ala Thr Arg Cys Thr Pro Cys Trp Ala Arg
Ala Gln Arg Arg Tyr Gly Arg Gly Ser Pro His Thr Cys Ala Arg Cys
                                         75
                     70
Ala Ser Ala Cys Gly Met Pro Arg Ile Cys Arg Ser Ala Leu Val Tyr
                                     90
                 85
Lys Ala Gly Ala Arg Glu Gly Ala Glu Arg Gly Val Ser Ala Ile Arg
                                                      110
                                 105
             100
Glu Arg Leu Gly Pro Leu Val Glu Gln Gly Arg Gln Arg Thr Ala Asn
                                                  125
                             120
Leu Gly Ala Gly Ala Gln Pro Leu Arg Asp Arg Ala Gln Ala Phe
                                              140
                         135
Gly Asp Arg Ile Arg Gly Arg Leu Glu Glu Val Gly Asn Gln Ala Arg
                                          155
                     150
 145
 Asp Arg Leu Glu Glu Val Arg Glu His Met Glu Glu Val Arg Ser Lys
                                                          175
                                     170
                 165
 Met Glu Glu Leu Ser Ser Pro Ser Ile Arg Ala Arg Gly Pro Phe Pro
                                                      190
                                 185
             180
```

```
Ala Ser Arg Ser Met Gln Val Ser Arg Val Leu Ala Ala Leu Cys Gly
         195
                            200
 Met Leu Leu Cys Ala Gly Ser
     210
 <210> 195
 <211> 412 ·
 <212> DNA
 <213> Mus musculus
 <220>
 <221> unsure
 <222> (14)...(14)
 <223> n = A, C, G or T
<400> 195
tttccaagat aaaactttat tggagacagc aaggagtata ctgaaagtgg gggagccatg 120
ccttcattcc ataactgcaa tcagatgctc tcctctgaga gagagtgtgt ggggagccaa 180
ggtgagaagc aggtatgatt cacaccccaa ctgcttggag agtgcttata tgacagtctt 240
tttctcgatt ttatttttc tcagttcttc aacacact ttggcttcat ttgggggaaa 300
attaaacaaa agaacagaat ttccctcccc cagagttact tatgaaatga cacagctgcc 360
cttttctttg aagggattct tgtcttctgg gattcccttt accagaggat cc
                                                                412
<210> 196
<211> 670
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (43)...(107)
<223> n = A, C, G or T
<400> 196
acaagcccta gccttgtgtc atggcttcaa tttggacatt gancatccca tgacnttcca 60
agagaatgca aaagnetttg nacagagtgt ggteeagett ggegganeea gtgtggttgt 120
tgcagccccc cagaaggcaa aggctgttaa ccagacaggt gccctctacc agtgtgacta 180
cagcacaage eggtgtgace ceateceet geaagtacet ecagaggetg tgaatatgte 240
cttgggcctg tccctggctg tttctactgt ccccagcag ctgctggcct gtggcccac 300
ggtgcaccaa aactgcaagg agaatactta tgtgaatgga ttgtgctatt tgttcggctc 360
caacctgctg aggccgcccc agcagttccc agaggctctc agagaatgtc ctcagcagga 420
gagtgacatt gicttettga tigatggete eggtageate aacaacattg actticagaa 480
gatgaaggag tttgtctcaa ctgtgatgga gcagttcaaa aagtctaaaa ccttgttctc 540
tttgatgcag tactcggacg agttccggat tcacttcacc ttcaatgact tcaagagaaa 600
ccctagccca agatcacacg tgagccccat aaagcagctg aatgggagga caaaaactgc 660
ctcgggatcc
                                                                670
```

```
<211> 223
 <212> PRT
 <213> Mus musculus
 <220>
 <221> UNSURE
 <222> (14)...(36)
 <223> Xaa = any amino acid
<400> 197
Gln Ala Leu Cys His Gly Phe Asn Leu Asp Ile Xaa His Pro
                                     10
Met Thr Phe Gln Glu Asn Ala Lys Xaa Phe Xaa Gln Ser Val Val Gln
Leu Gly Gly Xaa Ser Val Val Val Ala Ala Pro Gln Lys Ala Lys Ala
                             40
Val Asn Gln Thr Gly Ala Leu Tyr Gln Cys Asp Tyr Ser Thr Ser Arg
                         55
Cys Asp Pro Ile Pro Leu Gln Val Pro Pro Glu Ala Val Asn Met Ser
                    70
Leu Gly Leu Ser Leu Ala Val Ser Thr Val Pro Gln Gln Leu Leu Ala
                85
                                     90
Cys Gly Pro Thr Val His Gln Asn Cys Lys Glu Asn Thr Tyr Val Asn
                                 105
Gly Leu Cys Tyr Leu Phe Gly Ser Asn Leu Leu Arg Pro Pro Gln Gln
                            120
                                                 125
Phe Pro Glu Ala Leu Arg Glu Cys Pro Gln Glu Ser Asp Ile Val
                      135
                                             140
Phe Leu Ile Asp Gly Ser Gly Ser Ile Asn Asn Ile Asp Phe Gln Lys
                    150
                                        155
Met Lys Glu Phe Val Ser Thr Val Met Glu Gln Phe Lys Lys Ser Lys
                165
                                    170
Thr Leu Phe Ser Leu Met Gln Tyr Ser Asp Glu Phe Arg Ile His Phe
            180
                                185
Thr Phe Asn Asp Phe Lys Arg Asn Pro Ser Pro Arg Ser His Val Ser
                            200
Pro Ile Lys Gln Leu Asn Gly Arg Thr Lys Thr Ala Ser Gly Ser
    210
                        215
                                            220
<210> 198
<211> 640
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (21)...(21)
<223> n = A, C, G or T
```

```
<400> 198
ctgttgatgg cttttacatg nacgcctatg aagtcagcaa tgcggatttt gagaagtttg 60
tgaactcgac tggctatttg acagagctga gaagtttgaa gactctttcg tctttgaagg 120
catgttgagc gagcaagtga aaacgcatat ccaccaggca gttgcagctg ctccatggtg 180
gttgcctgtc aagggagcta attggagaca cccagagggt ccggactcca gtattctgca 240
caggicaaat catcoggitc tocatgittc ciggaacqat gcigtigcci actgcacatg 300
ggcgggcaag aggttgccta ctgaggcaga gtgggaatac agctgtagag gaggcctgca 360
gaacaggctt ttcccctggg gcaacaaact gcagcccaaa ggacagcatt atgccaacat 420
ctggcagggc aagtttcctg tgagcaacac tggcgaggat ggcttccaag gaactgcccc 480
cgttgatgcc tttcctccca atggctatgg cttatacaac atagtgggga atgtgtggga 540
gtggacctca gactggtgga ctgttcacca ttctgttgag gaaacgttca acccaaaggg 600
tcccacttct gggaaagacc gagtgaagaa gggtggatcc
                                                                   640
<210> 199
<211> 210
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (6)...(6)
<223> Xaa = any amino acid
<400> 199
Cys Trp Leu Leu His Xaa Arg Leu Ser Gln Gln Cys Gly Phe Glu Val
                                     10
Cys Glu Leu Asp Trp Leu Phe Asp Arg Ala Glu Lys Phe Glu Asp Ser
                                 25
Phe Val Phe Glu Gly Met Leu Ser Glu Gln Val Lys Thr His Ile His
                            40
Gln Ala Val Ala Ala Pro Trp Trp Leu Pro Val Lys Gly Ala Asn
Trp Arg His Pro Glu Gly Pro Asp Ser Ser Ile Leu His Arg Ser Asn
                    70
                                         75
                                                             80
His Pro Val Leu His Val Ser Trp Asn Asp Ala Val Ala Tyr Cys Thr
Trp Ala Gly Lys Arg Leu Pro Thr Glu Ala Glu Trp Glu Tyr Ser Cys
            100
                                105
Arg Gly Gly Leu Gln Asn Arg Leu Phe Pro Trp Gly Asn Lys Leu Gln
                           120
Pro Lys Gly Gln His Tyr Ala Asn Ile Trp Gln Gly Lys Phe Pro Val
                        135
                                            140
Ser Asn Thr Gly Glu Asp Gly Phe Gln Gly Thr Ala Pro Val Asp Ala
                    150
                                        155
                                                             160
Phe Pro Pro Asn Gly Tyr Gly Leu Tyr Asn Ile Val Gly Asn Val Trp
                165
                                    170
Glu Trp Thr Ser Asp Trp Trp Thr Val His His Ser Val Glu Glu Thr
                                185
                                                     190
Phe Asn Pro Lys Gly Pro Thr Ser Gly Lys Asp Arg Val Lys Lys Gly
        195
                            200
                                                205
```

```
Gly Ser
    210
<210> 200
<211> 263
<212> DNA
<213> Mus musculus
<400> 200
gaattcqcqq ccqcqtcqac qqccaqcctq qtctacaqaq tqqattcctq tcctqtcaqq 60
ttctttttga aatattagac aaccaatatg acaaaatacg aatgccaaac atcctgctgt 180
accgtacgat ctattttttt ttttttttt ggttgttgtt cttgaccaaa ataaatgatt 240
                                                                263
accggaggca atcacatgga tcc
<210> 201
<211> 87
<212> PRT
<213> Mus musculus
<400> 201
Ile Arg Gly Arg Val Asp Gly Gln Pro Gly Leu Gln Ser Gly Phe Leu
 1
                                   10
Ser Cys Gln Gly Cys Thr Met Ser Pro Tyr Leu Lys Glu Glu Glu Lys
           20
                               25
Lys Lys Arg Lys Lys Glu Arg Leu Leu Phe Glu Ile Leu Asp Asn Gln
                           40
Tyr Asp Lys Ile Arg Met Pro Asn Ile Leu Leu Tyr Arg Thr Ile Tyr
                       55
                                          60
Phe Cys Phe Phe Trp Leu Leu Phe Leu Thr Lys Ile Asn Asp Tyr
                   70
                                       75
                                                          80
Arg Arg Gln Ser His Gly Ser
               85
<210> 202
<211> 544
<212> DNA
<213> Mus musculus
<400> 202
gaattegegg eegegtegae etgtaegatt gteagtggat etgaegaeae eaaaaggget 60
caggatgcta ctgttgcaag ctctcctgtt cctcttaatc ctgcccagtc atgccgaaga 120
tgacgttact acaactgaag agctagctcc tgctttggtc cctccaccca agggaacttg 180
tgcaggttgg atggcaggca tcccaggaca tcctggccac aatggcacac caggccgtga 240
tggcagagat ggcactcctg gagagaaggg agagaaagga gatgcaggtc ttcttggtcc 300
taagggtgag acaggagatg ttggaatgac aggagctgaa gggccacggg gcttccccgg 360
aacccctggc aggaaaggag agcctggaga agccgcttat gtgtatcgct cagcgttcag 420
tgtggggctg gagacccgcg tcactgttcc caatgtaccc attcgcttta ctaagatctt 480
```

```
ctacaaccaa cagaatcatt atgacggcag cactggcaag ttctactgca acattccagg 540
 atcc
                                                                    544
<210> 203
<211> 181
<212> PRT
<213> Mus musculus
<400> 203
Asn Ser Arg Pro Arg Pro Val Arg Leu Ser Val Asp Leu Thr Thr
                                     10
Pro Lys Gly Leu Arg Met Leu Leu Leu Gln Ala Leu Leu Phe Leu Leu
             20
                                 25
Ile Leu Pro Ser His Ala Glu Asp Asp Val Thr Thr Glu Glu Leu
                             40
Ala Pro Ala Leu Val Pro Pro Pro Lys Gly Thr Cys Ala Gly Trp Met
                         55
                                             60
Ala Gly Ile Pro Gly His Pro Gly His Asn Gly Thr Pro Gly Arg Asp
Gly Arg Asp Gly Thr Pro Gly Glu Lys Gly Glu Lys Gly Asp Ala Gly
                 85
                                     90
Leu Leu Gly Pro Lys Gly Glu Thr Gly Asp Val Gly Met Thr Gly Ala
                                 105
                                                     110
Glu Gly Pro Arg Gly Phe Pro Gly Thr Pro Gly Arg Lys Gly Glu Pro
                             120
Gly Glu Ala Ala Tyr Val Tyr Arg Ser Ala Phe Ser Val Gly Leu Glu
                         135
                                             140
Thr Arg Val Thr Val Pro Asn Val Pro Ile Arg Phe Thr Lys Ile Phe
                    150
                                         155
                                                              160
Tyr Asn Gln Gln Asn His Tyr Asp Gly Ser Thr Gly Lys Phe Tyr Cys
                165
                                     170
                                                         175
Asn Ile Pro Gly Ser
            180
<210> 204
<211> 244
<212> DNA
<213> Mus musculus
<400> 204
gaattcgcgg ccgcgtcgac cattatttt ggttggttgt cttgggttag cattaaagcc 60
ttcacctatt tatggaggtt taggtttaat tgttagtggg tttgttggtt gtttaatggt 120
tttagggttt ggtggatcgt ttttaggttt aatagttttt ttaatttatt taggggggat 180
gttggttgtg tttggatata cgactgctat agctactgag gaatatccag agacttgtgg 240
atcc
                                                                   244
<210> 205
<211> 81
```

<212> PRT

```
<400> 205
Asn Ser Arg Pro Arg Pro Leu Phe Leu Val Gly Cys Leu Gly Leu
 1
Ala Leu Lys Pro Ser Pro Ile Tyr Gly Gly Leu Gly Leu Ile Val Ser
                                25
Gly Phe Val Gly Cys Leu Met Val Leu Gly Phe Gly Gly Ser Phe Leu
Gly Leu Ile Val Phe Leu Ile Tyr Leu Gly Gly Met Leu Val Val Phe
                        55
                                             60
Gly Tyr Thr Thr Ala Ile Ala Thr Glu Glu Tyr Pro Glu Thr Cys Gly
                                                             80
65
                                        75
Ser
<210> 206
<211> 244
<212> DNA
<213> Mus musculus
<400> 206
gaattcgcgg ccgcgtcgac cattatttt ggttggttgt cttgggttag cattaaagcc 60
ttcacctatt tatggaggtt taggtttaat tgttagtggg tttgttggtt gtttaatggt 120
tttagggttt ggtggatcgt ttttaggttt aatagttttt ttaatttatt taggggggat 180
gttggttgtg tttggatata cgactgctat agctactgag gaatatccag agacttgtgg 240
                                                                   244
atcc
<210> 207
<211> 81
<212> PRT
<213> Mus musculus
<400> 207
Asn Ser Arg Pro Arg Pro Leu Phe Leu Val Gly Cys Leu Gly Leu
Ala Leu Lys Pro Ser Pro Ile Tyr Gly Gly Leu Gly Leu Ile Val Ser
                                25
Gly Phe Val Gly Cys Leu Met Val Leu Gly Phe Gly Gly Ser Phe Leu
                            40
                                                 45
Gly Leu Ile Val Phe Leu Ile Tyr Leu Gly Gly Met Leu Val Val Phe
                        55
Gly Tyr Thr Thr Ala Ile Ala Thr Glu Glu Tyr Pro Glu Thr Cys Gly
65
                    70
                                        75
```

Ser

```
<211> 235
<212> DNA
<213> Mus musculus
<400> 208
qaatteqeqq ceqeqteqae etaqtqtqet etttqaqatt tttaagagea tttgagatae 60
aagaattttg aggggatgag gaatgttggt caaggtctaa atcacacata aaaaattttc 120
ttctqtqaat ttatcttctt tgcatatata tccctgctgg ccccttgttt tgattttgtt 180
attggtcatt ccaqctctca gtggaagacc ggaccctgtc attcatgaag gatcc
<210> 209
<211> 675
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (81)...(267)
<223> n = A, C, G or T
<400> 209
gaattcgcgg ccgcgtcgac ccacgttttt tgacccacaa ccgcaagttt tagatcctcg 60
cgagtaggaa atgaaggggt nccacacaga aggcagcqcc cactgggctc cactgatqca 120
gqttqcccac caqaccacat cactctqqcc ctqqqctcaq gqcatqatqt gagtqtgaga 180
gctttggccc ggttgccatt aagactcact ccaggtcaca ctgagggcaa gggttgctag 240
tccctggccg ctgggactct ctcatcntga gttctcccat caccatcact aagaatgttt 300
ttetggtaac cgaagttgaa ttgagacate caaggteate tatgeatttg gacaagatte 360
agacatctag gcggcttgtc cggctttacc ggggagaatc taaaaaagaa gcacattcat 420
cctccattat tttgatgtca tatctaagac aaaatgtcaa taaatgaagt atcaacattc 480
tatatcataa aagaagatac aattgcaatg ggaggtgcac aaataatgct tggcctaatt 540
cacaatgcac tggggactct ctggctctct ttgcacaatc tagaagacaa gagatatagc 600
atcggccata aacttatgtt agctagtatc tgctacctgt ttgtgtctgg aacatttttc 660
                                                                   675
atcaactcag gatcc
<210> 210
<211> 218
<212> PRT
<213> Mus musculus
<400> 210
Glu Phe Ala Ala Ser Thr His Val Phe Pro Thr Thr Ala Ser Phe
Arg Ser Ser Arg Val Gly Asn Glu Gly Val Pro His Arg Arg Gln Arg
                                25
Pro Leu Gly Ser Thr Asp Ala Gly Cys Pro Pro Asp His Ile Thr Leu
                            40
Ala Leu Gly Ser Gly His Asp Val Ser Val Arg Ala Leu Ala Arg Leu
Pro Leu Arg Leu Thr Pro Gly His Thr Glu Gly Lys Gly Cys Ser Leu
                    70
                                        75
                                                             80
65
```

```
Ala Ala Gly Thr Leu Ser Ser Val Leu Pro Ser Pro Ser Leu Arg Met
Phe Phe Trp Pro Lys Leu Asn Asp Ile Gln Gly His Leu Cys Ile Trp
            100
                                 105
Thr Arg Phe Arg His Leu Gly Gly Leu Ser Gly Phe Thr Gly Glu Asn
                             120
                                                 125
Leu Lys Lys His Ile His Pro Pro Leu Phe Cys His Ile Asp Lys
                         135
                                             140
Met Ser Ile Asn Glu Val Ser Thr Phe Tyr Ile Ile Lys Glu Asp Thr
                     150
                                         155
Ile Ala Met Gly Gly Ala Gln Ile Met Leu Gly Leu Ile His Asn Ala
                165
                                     170
Leu Gly Thr Leu Trp Leu Ser Leu His Asn Leu Glu Asp Lys Arg Tyr
                                 185
Ser Ile Gly His Lys Leu Met Leu Ala Ser Ile Cys Tyr Leu Phe Val
                             200
                                                 205
Ser Gly Thr Phe Phe Ile Asn Ser Gly Ser
    210
<210> 211
<211> 630
<212> DNA
<213> Mus musculus
<400> 211
gaattcgcgg cccgcgtcga cgtcactgtg gagctcagat cacagtgctg acagaatcca 60
tatttggaga attacataag gtttgaaaga gaggatagtg aaaggatacg aattcctaaa 120
aacqtttaat ctqqcctttt gtttqaacga aaqaqaaatt gaaaccaaat gaaataaatt 180
acttgttaga aagaatactg ccaacagcat agcaaaatga aattcttcct gctgctttcc 240
ctcattggat tctgctgggc ccaatatgac ccacatactc aatatggacg aactgctatt 300
gtccacctgt ttgagtggcg ctgggttgat attgctaagg aatgtgagag atacttagct 360
cctaatggat ttgcaggtgt gcaggtctct ccacccaatg aaaacatcgt agtccacagc 420
ccttcaagac catggtggga aagatatcaa ccaattagct acaaaatatg ttccaggtct 480
ggaaatgaag atgaattcag ggacatggtg aacaggtgca acaatgttgg tgtccgtatt 540
tatgtggatg ctgtcattaa ccacatgtgt ggagtggggg ctcaagctgg acaaagcagt 600
acatgtggaa gttatttcaa ccccqqatcc
                                                                   630
<210> 212
<211> 205
<212> PRT
<213> Mus musculus
<400> 212
Glu Phe Ala Ala Arg Val Asp Val Thr Val Glu Leu Arg Ser Gln Cys
Gln Asn Pro Tyr Leu Glu Asn Tyr Ile Arg Phe Glu Arg Glu Asp Ser
                                25
Glu Arg Ile Arg Ile Pro Lys Asn Val Ser Gly Leu Leu Phe Glu Arg
        35
                            40
```

```
Lys Arg Asn Asn Gln Met Lys Ile Thr Cys Lys Glu Tyr Cys Gln Gln
His Ser Lys Met Lys Phe Phe Leu Leu Ser Leu Ile Gly Phe Cys
                                         75
                    70
Trp Ala Gln Tyr Asp Pro His Thr Gln Tyr Gly Arg Thr Ala Ile Val
                                     90
                85
His Leu Phe Glu Trp Arg Trp Val Asp Ile Ala Lys Glu Cys Glu Arg
                                                     110
            100
                                105
Tyr Leu Ala Pro Asn Gly Phe Ala Gly Val Gln Val Ser Pro Pro Asn
                                                 125
                            120
Glu Asn Ile Val Val His Ser Pro Ser Arg Pro Trp Trp Glu Arg Tyr
                                             140
                        135
Gln Pro Ile Ser Tyr Lys Ile Cys Ser Arg Ser Gly Asn Glu Asp Glu
                                         155
                    150
Phe Arg Asp Met Val Asn Arg Cys Asn Asn Val Gly Val Arg Ile Tyr
                                    170
                165
Val Asp Ala Val Ile Asn His Met Cys Gly Val Gly Ala Gln Ala Gly
                                 185
                                                     190
            180
Gln Ser Ser Thr Cys Gly Ser Tyr Phe Asn Pro Gly Ser
        195
                            200
<210> 213
<211> 370
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (337)...(337)
<223> n = A, C, G or T
<400> 213
qaattcqcqq ccqcqtcqac qtaaaaqqcc taqqaqattt qttqatccaa taaatatgat 60
tagggaaaca attattaggg ttcatgttcg tccttttggt gtgtggatta gcattatttg 120
tttgataata agtttaacta gctggttgga ggttttgcgg tcggccgaga agacggcact 180
qctqcaqqat qqqaaqaqqa tqqtqcacta tttqttccca gacqqgaaqq aaatqqcaqa 240
agaatatgac gagaagacca gtgaactcct tgtgaggaag tggcgtgtga aaaatgccct 300
gggagccttg ggccagtggc agcttgaagt gggagancca gtgccctcag gagctgggag 360
                                                                    370
cctgggatcc
<210> 214
<211> 123
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (112)...(112)
<223> Xaa = any amno acid
```

```
<400> 214
Asn Ser Arg Pro Arg Arg Arg Lys Arg Pro Arg Arg Phe Val Asp Pro
Ile Asn Met Ile Arg Glu Thr Ile Ile Arg Val His Val Arg Pro Phe
                                25
Gly Val Trp Ile Ser Ile Ile Cys Leu Ile Ile Ser Leu Thr Ser Trp
                                                 45
                            40
Leu Glu Val Leu Arg Ser Ala Glu Lys Thr Ala Leu Leu Gln Asp Gly
                        55
Lys Arg Met Val His Tyr Leu Phe Pro Asp Gly Lys Glu Met Ala Glu
                    70
Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu Val Arg Lys Trp Arg Val
Lys Asn Ala Leu Gly Ala Leu Gly Gln Trp Gln Leu Glu Val Gly Xaa
                                105
            100
Pro Val Pro Ser Gly Ala Gly Ser Leu Gly Ser
        115
                            120
<210> 215
<211> 508
<212> DNA
<213> Mus musculus
<400> 215
gaattcgcgg ccgcgtcgac gagatcgaga aattcgataa gtcgaagttg aagaaaacag 60
aaacgcaaga gaaaaatcct ctgccttcaa aagaaacaat tgaacaagag aagcaagctg 120
gcgaatcgta atgaggcgag cgccgccaat atgcactgta cattccacga gcattgcctt 180
cttattttac ttcttttagc tgtttaactt tgtaagatgc aaagaggttg gatcaagttt 240
aaatgactgt gctgcccctt tcacatcaaa gaatcagaac tactgagcag gaaggcctcc 300
cctgcctctc ccacccatct gatggtctgg ctagcagaga gggaaaagaa cttgcatgtt 360
ggtgaaggaa aaagctgggt gggagatgat gaaatagaga ggaaaattca agatggtcaa 420
agatgtcctg caggatgtaa aatgcagttt aatcagagtg ccatttttt ttgttcaaac 480
                                                                   508
aattttaatt attggaatgc acggatcc
<210> 216
<211> 162
<212> PRT
<213> Mus musculus
<400> 216
Asn Ser Arg Pro Arg Arg Arg Asp Arg Glu Ile Arg Val Glu Val Glu
                                     10
Glu Asn Arg Asn Ala Arg Glu Lys Ser Ser Ala Phe Lys Arg Asn Asn
                                                     30
                                25
Thr Arg Glu Ala Ser Trp Arg Ile Val Met Arg Arg Ala Pro Pro Ile
                             40
                                                 45
Cys Thr Val His Ser Thr Ser Ile Ala Phe Leu Phe Tyr Phe Phe Leu
    50
                        55
```

```
Phe Asn Phe Val Arg Cys Lys Glu Val Gly Ser Ser Leu Asn Asp Cys
                                       75
65
                   70
Ala Ala Pro Phe Thr Ser Lys Asn Gln Asn Tyr Ala Gly Arg Pro Pro
                                   90
Leu Pro Leu Pro Pro Ile Trp Ser Gly Gln Arg Gly Lys Arg Thr Cys
                               105
Met Leu Val Lys Glu Lys Ala Gly Trp Glu Met Met Lys Arg Gly Lys
                           120
                                               125
Phe Lys Met Val Lys Asp Val Leu Gln Asp Val Lys Cys Ser Leu Ile
                       135
                                           140
    130
Arg Val Pro Phe Phe Val Gln Thr Ile Leu Ile Ile Gly Met His
                                       155
                                                          160
145
                   150
Gly Ser
<210> 217
<211> 920
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (2)...(302)
<223> n = A, C, G or T
<400> 217
tntngaattc cccagttaan agaatttggc ccaataggnc cccgggaccg gtntnggngg 60
antcgatgtt gccaaaccag gntcncaang ttttgtaacc cngaagatga ggaggactac 120
tnnttttcgg aagccttaag gcatnaacgt cagacagnaa naaagtgtcc aagtgggact 180
gccgntcttc taccaatccc agccgaagaa tgctcctgtg accttcattg tgnatgganc 240
agtagtgaaa tttgcccaag gcttgggaaa nccaatatat atactcagaa ccaagagcct 300
cntaagaagg tatgatgacc aaaaggacta aagacatggg caagttcagc tctgttactg 360
tgtctaccca ttgatgaaga agaagaggag atagaggcta gggaagttgc tgactcttac 420
gcgcagaatg ccaaagtgat tgaaaagcag ctggagcgca aaggcatgag caagaggagg 480
ctgcaggagt tggctgaatt ggaaqccaag aaagcaaaaa tgaaggggac cctgatcgac 540
aatcagttca aataatcaag atctttctgg gttcagactg gaggcagcag ttagatgagg 600
aagagtaget teaagatgtg ttttegttte tgttteteee agaagggttt tetgaceate 660
ctattggttt tetgacactt tttetttet teeattgaag teettgaete cattteactt 720
gctttctagg aggtagattg tttgtaaaat ctctgtatat atgttttctg tctttcttgt 780
ctttgagatc aggtcttgtt acataccaga gtatggcctt gaactttgtg agcctcctct 840
920
aggaccacac caccggatcc
<210> 218
<211> 291
<212> PRT
<213> Mus musculus
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<220>

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<221> UNSURE
<222> (1)...(85)
<223> Xaa = any amino acid
<400> 218
Xaa Asn Ser Pro Val Xaa Arg Ile Trp Pro Asn Arg Xaa Pro Gly Pro
Val Xaa Xaa Xaa Ser Met Leu Pro Asn Gln Xaa Xaa Xaa Val Leu Pro
Xaa Arg Gly Gly Leu Leu Xaa Phe Gly Ser Leu Lys Ala Xaa Thr Ser
Asp Xaa Xaa Lys Val Ser Lys Trp Asp Cys Arg Ser Ser Thr Asn Pro
                        55
Ser Arg Arg Met Leu Leu Pro Ser Leu Xaa Met Xaa Gln Asn Leu Pro
                    70
                                         75
Lys Ala Trp Glu Xaa Gln Tyr Ile Tyr Ser Glu Pro Arg Ala Ser Glu
                                    90
Gly Met Met Thr Lys Arg Thr Lys Asp Met Gly Lys Phe Ser Ser Val
                                105
                                                     110
Thr Val Ser Thr His Arg Arg Gly Asp Arg Gly Gly Ser Cys Leu
                            120
Leu Arg Ala Glu Cys Gln Ser Asp Lys Ala Ala Gly Ala Gln Arg His
                        135
Glu Gln Glu Ala Ala Gly Val Gly Ile Gly Ser Gln Glu Ser Lys
                    150
                                        155
Asn Glu Gly Asp Pro Asp Arg Gln Ser Val Gln Ile Ile Lys Ile Phe
                165
                                    170
Leu Gly Ser Asp Trp Arg Gln Gln Leu Asp Glu Glu Leu Gln Asp
            180
                                185
Val Phe Ser Phe Leu Phe Leu Pro Glu Gly Phe Ser Asp His Pro Ile
        195
                            200
                                                205
Gly Phe Leu Thr Leu Phe Leu Phe Phe His Ser Pro Leu His Phe Thr
                        215
                                            220
Cys Phe Leu Gly Gly Arg Leu Phe Val Lys Ser Leu Tyr Ile Cys Phe
                    230
                                        235
Leu Ser Phe Leu Ser Leu Arg Ser Gly Leu Val Thr Tyr Gln Ser Met
                245
                                    250
Ala Leu Asn Phe Val Ser Leu Leu Ser Cys Leu Ser Leu Ser Leu Ser
                                265
Leu Ser Leu Ser Leu Ser Leu Leu Lys Phe Gln Asp His Thr
        275
                            280
                                                285
Thr Gly Ser
    290
```

<210> 219

<211> 400

<212> DNA

<213> Mus musculus

```
<220>
<221> unsure
<222> (38)...(41)
\langle 223 \rangle n = A, C, G or T
<400> 219
gaattcgcgg ccgcgtcgac tttttttttt tttttttntn ntttgatttt tccaaqataa 60
aactttattg gagacagcaa ggagtatact gaaagtgggg gagccatgcc ttcattccat 120
aactgcaatc agatgctctc ctctgagaga gagtgtgtgg ggagccaagg tgagaagcag 180
gtatgattca caccccaact gcttggagag tgcttatatg acagtctttt tctcgatttt 240
attttttctc agttcttcaa cacacattt ggcttcattt gggggaaaat taaacaaaag 300
aacagaattt ccctcccca gagttactta tgaaatgaca cagctgccct tttctttgaa 360
gggattcttg tcttctggga ttccctttac cagaggatcc
<210> 220
<211> 132
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (13)...(14)
<223> Xaa = any amino acid
<400> 220
Asn Ser Arg Pro Arg Arg Leu Phe Phe Phe Phe Yaa Xaa Phe Phe
                                     10
Gln Asp Lys Thr Leu Leu Glu Thr Ala Arg Ser Ile Leu Lys Val Gly
                                 25
Glu Pro Cys Leu His Ser Ile Thr Ala Ile Arg Cys Ser Pro Leu Arg
                             40
                                                  45
Glu Ser Val Trp Gly Ala Lys Val Arg Ser Arg Tyr Asp Ser His Pro
                         55
Asn Cys Leu Glu Ser Ala Tyr Met Thr Val Phe Phe Ser Ile Leu Phe
                     70
Phe Leu Ser Ser Ser Thr His Thr Leu Ala Ser Phe Gly Gly Lys Leu
                85
Asn Lys Arg Thr Glu Phe Pro Ser Pro Arg Val Thr Tyr Glu Met Thr
            100
                                 105
                                                     110
Gln Leu Pro Phe Ser Leu Lys Gly Phe Leu Ser Ser Gly Ile Pro Phe
        115
                             120
                                                 125
Thr Arg Gly Ser
    130
<210> 221
<211> 244
<212> DNA
<213> Mus musculus
```

```
<220>
<221> unsure
<222> (210)...(210)
<223> n = A, C, G or T
<400> 221
gaattcgcgg ccgcgtcgac ggagtcttct gactgctggt ggagcaggtc tcaggaatct 60
cttcgcttca gcttcaatca tggcctgtgg tctggtcgcc agcaacctga atctcaaacc 120
tggggaatgt ctcaaagttc ggggagaggt ggcctcggac gccaagagct ttgtgctgaa 180
cctgggaaaa gacagcaaca acctgtgccn acacttcaat cctcgcttca atgcacatgg 240
                                                                    244
atcc
<210> 222
<211> 81
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (70)...(70)
<223> Xaa = any amino acid
<400> 222 -
Asn Ser Arg Pro Arg Arg Ser Leu Leu Thr Ala Gly Gly Ala Gly
                                     10
Leu Arg Asn Leu Phe Ala Ser Ala Ser Ile Met Ala Cys Gly Leu Val
                                 25
Ala Ser Asn Leu Asn Leu Lys Pro Gly Glu Cys Leu Lys Val Arg Gly
                             40
Glu Val Ala Ser Asp Ala Lys Ser Phe Val Leu Asn Leu Gly Lys Asp
                        55
                                             60
Ser Asn Asn Leu Cys Xaa His Phe Asn Pro Arg Phe Asn Ala His Gly
                                         75
                                                             80
65
Ser
<210> 223
<211> 142
<212> DNA
<213> Mus musculus
<400> 223
gaattcgcgg ccgcgtcgac gttcattatt tttggttggt tgtcttgggt tagcattaaa 60
gccttcacct atttatggag gtttaggttt aattgttagt gggtttgttg gttgtttaat 120
                                                                    142
ggttttaggg tttggtggat cc
<210> 224
<211> 55
<212> PRT
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50 55

Val Leu Gly Phe Gly Gly Ser

<210> 225 <211> 394 <212> DNA <213> Mus musculus

<400> 225

gaattcgcgg ccgcgtcgac ttttttttt tttttttga ttttccaag ataaaacttt 60 attggagaca gcaaggagta tactgaaagt gggggagcca tgccttcatt ccataactgc 120 aatcagatgc tctcctctga gagagagtgt gtggggagcc aaggtgagaa gcaggtatga 180 ttcacacccc aactgcttgg agagtgctta tatgacagtc ttttctcga ttttatttt 240 tctcagttct tcaacacaca ctttggcttc atttggggga aaattaaaca aaagaacaga 300 atttccctcc cccagagtta cttatgaaat gacacagctg cccttttctt tgaagggatt 360 cttgtcttct gggattccct ttaccagagg atcc

<210> 226 <211> 130 <212> PRT <213> Mus musculus

<400> 226

Asn Ser Arg Pro Arg Arg Leu Phe Phe Phe Phe Phe Phe Gln Asp 10 Lys Thr Leu Leu Glu Thr Ala Arg Ser Ile Leu Lys Val Gly Glu Pro Cys Leu His Ser Ile Thr Ala Ile Arg Cys Ser Pro Leu Arg Glu Ser 40 45 Val Trp Gly Ala Lys Val Arg Ser Arg Tyr Asp Ser His Pro Asn Cys Leu Glu Ser Ala Tyr Met Thr Val Phe Phe Ser Ile Leu Phe Phe Leu Ser Ser Ser Thr His Thr Leu Ala Ser Phe Gly Gly Lys Leu Asn Lys 85 90 Arg Thr Glu Phe Pro Ser Pro Arg Val Thr Tyr Glu Met Thr Gln Leu 100 105 110 Pro Phe Ser Leu Lys Gly Phe Leu Ser Ser Gly Ile Pro Phe Thr Arg 115 120 125 Gly Ser

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<210> 227
<211> 480
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (21)...(36)
<223> n = A, C, G or T
<400> 227
tttaagaaca actgaacata tgttgtgtgt accgggcata aaggatgaat gggcccttta 120
gttaacccac tgcttggata acatgacact tagtccactt ccatctctc ggagtcggtg 180
tgctgtgagc ttcctttggg tggatctggg ctggtctctg aaccactctg tccgtccatt 240
ggtccattgt gctcactacc agtttttgct ttgtcttcag gagcttctac ttttggtttg 300
ggcttataaa cgatggggtt acagaaatta tccagttcct ttgactttgt aactatttct 360
gacactttta ccacgggatc ttgagtgaga cttaatttat tctgtgcatt catcttactg 420
tttagccagt tcatggagtc actgatgtac ttttcaactc tttccatttc agcaggatcc 480
<210> 228
<211> 154
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (12)...(12)
<223> Xaa = any amino acid
<400> 228
Glu Phe Ala Ala Ser Thr Phe Phe Phe Phe Xaa Phe Phe Phe
Phe Phe Phe Phe Lys Asn Asn Thr Tyr Val Val Cys Thr Gly His
                               25
Lys Gly Met Gly Pro Leu Val Asn Pro Leu Leu Gly His Asp Thr Ser
                           40
Thr Ser Ile Ser Pro Glu Ser Val Cys Cys Glu Leu Pro Leu Gly Gly
                       55
Ser Gly Leu Val Ser Glu Pro Leu Cys Pro Ser Ile Gly Pro Leu Cys
                   70
                                      75
Ser Leu Pro Val Phe Ala Leu Ser Ser Gly Ala Ser Thr Phe Gly Leu
               85
                                  90
Gly Leu Thr Met Gly Leu Gln Lys Leu Ser Ser Ser Phe Asp Phe Val
           100
                              105
                                                  110
Thr Ile Ser Asp Thr Phe Thr Thr Gly Ser Val Arg Leu Asn Leu Phe
```

```
125
                           120
       115
Cys Ala Phe Ile Leu Leu Phe Ser Gln Phe Met Glu Ser Leu Met Tyr
                       135
                                          140
Phe Ser Thr Leu Ser Ile Ser Ala Gly Ser
                   150
145
<210> 229
<211> 420
<212> DNA
<213> Mus musculus
<400> 229
ttttgatttt tccaagataa aactttattg gagacagcaa ggagtatact gaaagtgggg 120
qaqccatqcc ttcattccat aactqcaatc agatgctctc ctctgagaga gagtgtgtgg 180
ggagccaagg tgagaagcag gtatgattca caccccaact gcttggagag tgcttatatg 240
acagtetttt tetegatttt atttttete agttetteaa cacacaettt ggetteattt 300
gggggaaaat taaacaaaag aacagaattt ccctccccca gagttactta tgaaatgaca 360
cagctgccct tttctttgaa gggattcttg tcttctggga ttccctttac cagaggatcc 420
<210> 230
<211> 139
<212> PRT
<213> Mus musculus
<400> 230
Glu Phe Ala Ala Ser Thr Phe Phe Phe Phe Phe Phe Phe Phe Phe
                                  10
Phe Phe Phe Phe Phe Phe Gln Asp Lys Thr Leu Leu Glu Thr Ala
                              25
Arg Ser Ile Leu Lys Val Gly Glu Pro Cys Leu His Ser Ile Thr Ala
                           40
Ile Arg Cys Ser Pro Leu Arg Glu Ser Val Trp Gly Ala Lys Val Arg
                       55
                                          60
Ser Arg Tyr Asp Ser His Pro Asn Cys Leu Glu Ser Ala Tyr Met Thr
                                      75
                   70
Val Phe Phe Ser Ile Leu Phe Phe Leu Ser Ser Thr His Thr Leu
                                  90
               85
Ala Ser Phe Gly Gly Lys Leu Asn Lys Arg Thr Glu Phe Pro Ser Pro
                              105
Arg Val Thr Tyr Glu Met Thr Gln Leu Pro Phe Ser Leu Lys Gly Phe
                                              125
                           120
Leu Ser Ser Gly Ile Pro Phe Thr Arg Gly Ser
   130
                       135
```

<210> 231 <211> 629

```
<213> Mus musculus
<400> 231
gaattcgcgg ccgcgtcgac gtcactgtgg agctcagatc acagtgctga cagaatccat 60
atttggagaa ttacataagg tttgaaagag aggatagtga aaggatacga attcctaaaa 120
acgtttaatc tggccttttg tttgaacgaa agagaaattg aaaccaaatg aaataaatta 180
cttgttagaa agaatactgc caacagcata gcaaaatgaa attcttcctg ctgctttccc 240
tcattggatt ctgctgggcc caatatgacc cacatactca atatggacga actgctattg 300
tccacctgtt tgagtggcgc tgggttgata ttgctaagga atgtgagaga tacttagctc 360
ctaatggatt tgcaggtgtg caggtctctc cacccaatga aaacatcgta gtccacagcc 420
cttcaagacc atggtgggaa agatatcaac caattagcta caaaatatgt tccaggtctg 480
gaaatgaaga tgaattcagg gacatggtga acaggtgcaa caatgttggt gtccgtattt 540
atgtggatgc tgtcattaac cacatgtgtg gagtgggggc tcaagctgga caaagcagta 600
catgtggaag ttatttcaac cccggatcc
<210> 232
<211> 204
<212> PRT
<213> Mus musculus
<400> 232
Ile Arg Gly Arg Val Asp Val Thr Val Glu Leu Arg Ser Gln Cys Gln
                                    10
Asn Pro Tyr Leu Glu Asn Tyr Ile Arg Phe Glu Arg Glu Asp Ser Glu
                                25
            20
Arg Ile Arg Ile Pro Lys Asn Val Ser Gly Leu Leu Phe Glu Arg Lys
                            40
                                                 45
Arg Asn Asn Gln Met Lys Ile Thr Cys Lys Glu Tyr Cys Gln Gln His
Ser Lys Met Lys Phe Phe Leu Leu Ser Leu Ile Gly Phe Cys Trp
Ala Gln Tyr Asp Pro His Thr Gln Tyr Gly Arg Thr Ala Ile Val His
Leu Phe Glu Trp Arg Trp Val Asp Ile Ala Lys Glu Cys Glu Arg Tyr
                                105
                                                     110
Leu Ala Pro Asn Gly Phe Ala Gly Val Gln Val Ser Pro Pro Asn Glu
                                                 125
        115
                            120
Asn Ile Val Val His Ser Pro Ser Arg Pro Trp Trp Glu Arg Tyr Gln
                        135
                                            140
Pro Ile Ser Tyr Lys Ile Cys Ser Arg Ser Gly Asn Glu Asp Glu Phe
                    150
                                        155
Arg Asp Met Val Asn Arg Cys Asn Asn Val Gly Val Arg Ile Tyr Val
                                    170
                165
Asp Ala Val Ile Asn His Met Cys Gly Val Gly Ala Gln Ala Gly Gln
                                185
                                                     190
Ser Ser Thr Cys Gly Ser Tyr Phe Asn Pro Gly Ser
```

629

<212> DNA

```
<210> 233
<211> 254
<212> DNA
<213> Mus musculus
<400> 233
gaattcgcgg ccgcgtcgac ggatttttct tgagaaaatc ttgggtgaga ttattctgga 60
ttctatttaa atgtgtgtat ataatgat, ta ggattttatt tttacagtca tatctacttc 120
cttccttatg tgcgaaatct attgcaacat attatgcacc atactcaaat ccctggtgtt 180
ccagccaagg ttcttgggtt tcaccacagt acagtaatgt gactccaata ccagaaggaa 240
                                                                    254
agaatgtggg atcc
<210> 234
<211> 84
<212> PRT
<213> Mus musculus
<400> 234
Ile Arg Gly Arg Val Asp Gly Phe Phe Leu Arg Lys Ser Trp Val Arg
                                     10
Leu Phe Trp Ile Leu Phe Lys Cys Val Tyr Ile Met Ile Arg Ile Leu
                                 25
Phe Leu Gln Ser Tyr Leu Leu Pro Ser Leu Cys Ala Lys Ser Ile Ala
                                                  45
                             40
Thr Tyr Tyr Ala Pro Tyr Ser Asn Pro Trp Cys Ser Ser Gln Gly Ser
                                             60
                         55
    50
Trp Val Ser Pro Gln Tyr Ser Asn Val Thr Pro Ile Pro Glu Gly Lys
                                                              80 -
                    70
                             ٠.
                                         75
Asn Val Gly Ser
<210> 235
<211> 660
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (10)...(165)
\langle 223 \rangle n = A, C, G or T
<400> 235
gtcacccaan actgcggcat tatgaggaca ttatgacgaa ataaggttaa aaaagaagtg 60
aagaacagtt gggtccagtg gcgaaganac acggccaggn tggcaaaana gtgcagcggc 120
acaggeegat tggaacegae atgaggatet acgeaacega eteggneagt acegeaacga 180
ggtgcacacc atgctgggcc agagcacaga gaagatacgg gcgcggctct ccacacacct 240
gcgcaagatg cgcaagcgct tgatgcggga tgccgaggat ctgcagaagc gcctagctgt 300
gtacaagcag gggcacgcga gggcgccgag cgcggtgtga gtgccatccg tgagcgcctg 360
gggcctctgg tggagcaagg tcgccagcgc accgccaacc taggcgctgg ggccgcccag 420
```

```
cctctgcgcg atcgcgccca ggcttttggt gaccgcatcc gagggcggct ggaggaagtg 480 ggcaaccagg cccgtgaccg cctagaggag gtgcgttgagc acatggagga ggtgcgctcc 540 aagatggagg aactctcgag tcccagcatc agagcgcgtg gaccttttcc cgcgtcccgc 600 agcatgcagg tctcccgtgt gctggccgcg ctgtgcggca tgctactctg cgccggatcc 660 <210> 236
```

```
<211> 218
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (4)...(54)
<223> Xaa = any amino acid
<400> 236
Val Thr Gln Xaa Cys Gly Ile Met Arg Thr Leu Arg Asn Lys Val Lys
                                     10
Lys Glu Val Lys Asn Ser Trp Val Gln Trp Arg Arg Xaa Thr Ala Arg
                                 25
Xaa Ala Lys Xaa Cys Ser Gly Thr Gly Arg Leu Glu Pro Thr Gly Ser
Thr Gln Pro Thr Arg Xaa Val Pro Gln Arg Gly Ala His His Ala Gly
                        55
Pro Glu His Arq Glu Asp Thr Gly Ala Ala Leu His Thr Pro Ala Gln
                                         75
Asp Ala Gln Ala Leu Asp Ala Gly Cys Arg Gly Ser Ala Glu Ala Pro
Ser Cys Val Gln Ala Gly Ala Arg Glu Gly Ala Glu Arg Gly Val Ser
            100
                                 105
                                                     110
Ala Ile Arg Glu Arg Leu Gly Pro Leu Val Glu Gln Gly Arg Gln Arg
                             120
                                                 125
        115
Thr Ala Asn Leu Gly Ala Gly Ala Ala Gln Pro Leu Arg Asp Arg Ala
                        135
                                             140
Gln Ala Phe Gly Asp Arg Ile Arg Gly Arg Leu Glu Glu Val Gly Asn
                    150
                                         155
Gln Ala Arg Asp Arg Leu Glu Glu Val Arg Glu His Met Glu Glu Val
                165
                                     170
Arg Ser Lys Met Glu Glu Leu Ser Ser Pro Ser Ile Arg Ala Arg Gly
            180
                                 185 .
Pro Phe Pro Ala Ser Arg Ser Met Gln Val Ser Arg Val Leu Ala Ala
                            200
Leu Cys Gly Met Leu Leu Cys Ala Gly Ser
    210
                        215
```

<210> 237 <211> 519

<212> DNA

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<400> 237
cctgcaggag atatatccag agctgcagat cacaaatgtg atgaagcaaa ccagccagtc 60
aatattgata gttggtgccg aagggacaaa aggcagtgca agagtcacat tgttatacca 120
ttcaagtgtc ttgtgggtga atttgtaagt gatgtcctgc tagttccaga taactgccag 180
tttttccacc aagagcggat ggaggtgtgt gagaagcacc agcgctggca cacgttagtc 240
aaggaggcat gtctgactga ggggctgacc ttatatagct atggcatgct gctgcctgc 300
ggggtagacc agttccatgg caccgagtat gtgtgctgcc ctcagacaaa gactgttgac 360
tcggactcga ctatgtccaa agaagaggag gaagaggaag aggatgaaga ggacgaagag 420
gaagactatg atcttgataa aagtgaattt cctactgaag cagatttgga agacttcaca 480
gaagcagcag cagatgagga agaagaggat gagggatcc
<210> 238
<211> 173
<212> PRT
<213> Mus musculus
<400> 238
Pro Ala Gly Asp Ile Ser Arg Ala Ala Asp His Lys Cys Asp Glu Ala
Asn Gln Pro Val Asn Ile Asp Ser Trp Cys Arg Arg Asp Lys Arg Gln
                                25
Cys Lys Ser His Ile Val Ile Pro Phe Lys Cys Leu Val Gly Glu Phe
                            40
Val Ser Asp Val Leu Leu Val Pro Asp Asn Cys Gln Phe Phe His Gln
                        55
Glu Arg Met Glu Val Cys Glu Lys His Gln Arg Trp His Thr Leu Val
                    70
Lys Glu Ala Cys Leu Thr Glu Gly Leu Thr Leu Tyr Ser Tyr Gly Met
                85
                                    90
Leu Leu Pro Cys Gly Val Asp Gln Phe His Gly Thr Glu Tyr Val Cys
            100
                                105
                                                    110
Cys Pro Gln Thr Lys Thr Val Asp Ser Asp Ser Thr Met Ser Lys Glu
                            120
                                                125
Glu Glu Glu Glu Glu Asp Glu Glu Asp Glu Glu Asp Tyr Asp
                        135
                                            140
Leu Asp Lys Ser Glu Phe Pro Thr Glu Ala Asp Leu Glu Asp Phe Thr
                    150
                                        155
                                                            160
Glu Ala Ala Asp Glu Glu Glu Asp Glu Gly Ser
                165
                                    170
<210> 239
<211> 678
<212> DNA
<213> Mus musculus
```

519

<220>

<221> unsure

```
<222> (9)...(160)
<223> n = A, C, G or T
<400> 239
gtggcccant ccggcccntg cccagtgngt ggctccngct ggcacgccag cggccttgga 60
agaageteaa geecatgagg eeggegege ntgeegeegg tgeaaaagag aeggagetee 120
cggcccccgc gggtggagcg ggggatcaat gcggttcagn aatcgattcc agcgtttcat 180
gaaccatcgg gccccagtaa tggccgctac aaaccaacgt gctacgaaca tgctgccaat 240
tgctacacac acgcattect cattqttccq gccattqtqq gcaqtqccct cctccatcqq 300
ctgtctgatg actgctggga gaagataaca gcatggatct acgggatggg cctttgtgcc 360
ctcttcatcg tctccacagt gtttcacata gtatcatgga agaagagcca cttgagaaca 420
gtggagcatt gtttccacat gtgcgatcgg atggtcatct acttcttcat tgctgcttcc 480
tacgccccat ggttaaatct ccgtgaactt ggacccctgg catctcatat gcgttggttt 540
atctggctca tggcagctgg aggaaccatt tatgtatttc tctaccatga aaagtataaa 600
gtggttgaac ttttcttcta tctcacgatg ggattttctc cagccttggt ggtgacatca 660
atgaataaca ctggatcc
                                                                   678
<210> 240
<211> .225
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (3)...(53)
<223> Xaa = any amino acid
<400> 240
Val Ala Xaa Ser Gly Pro Cys Pro Val Xaa Gly Ser Xaa Trp His Ala
Ser Gly Leu Gly Arg Ser Ser Pro Gly Arg Arg Ala Xaa Pro Pro
                                25
Val Gln Lys Arg Arg Ser Ser Arg Pro Pro Arg Val Glu Arg Gly Ile
Asn Ala Val Gln Xaa Ser Ile Pro Ala Phe His Glu Pro Ser Gly Pro
                        55
Ser Asn Gly Arg Tyr Lys Pro Thr Cys Tyr Glu His Ala Ala Asn Cys
                                         75
Tyr Thr His Ala Phe Leu Ile Val Pro Ala Ile Val Gly Ser Ala Leu
                85
                                     90
Leu His Arg Leu Ser Asp Asp Cys Trp Glu Lys Ile Thr Ala Trp Ile
                                105
                                                     110
Tyr Gly Met Gly Leu Cys Ala Leu Phe Ile Val Ser Thr Val Phe His
        115
                            120
                                                125
Ile Val Ser Trp Lys Lys Ser His Leu Arg Thr Val Glu His Cys Phe
                        135
                                             140
His Met Cys Asp Arg Met Val Ile Tyr Phe Phe Ile Ala Ala Ser Tyr
                    150
                                        155
Ala Pro Trp Leu Asn Leu Arg Glu Leu Gly Pro Leu Ala Ser His Met
```

165

```
Arg Trp Phe Ile Trp Leu Met Ala Ala Gly Gly Thr Ile Tyr Val Phe
                                185
                                                     190
            180
Leu Tyr His Glu Lys Tyr Lys Val Val Glu Leu Phe Phe Tyr Leu Thr
                            200
Met Gly Phe Ser Pro Ala Leu Val Val Thr Ser Met Asn Asn Thr Gly
                                             220
                        215
Ser
225
<210> 241
<211> 655
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (16)...(85)
<223> n = A, C, G or T
<400> 241
gttgtagatc tgaaancaag aaagaaggcg gggcttgagg tcctgaggtc acttaagggc 60
caccntnttt gacntaagac ctcantaggc cccgcctcta aaggtttctg acctcaatag 120
gccttcctgg agaactagtt tctaactctc aggcccttgg gacattgcat ctcagtagta 180
ggtgcctctc tacctgtgtt tggcttgttc atgattggca gacactctgc ctggctctgc 240
acagcagcgg ctcagcatca gcatccagct gcttgctgtg tgttagttgt ctcacagctg 300
agggetetge eteggetact teaggettte eggttaggaa gataatttgg teacttgtgt 360
ctgtggccac tcttagaatt ttctcttttg agggaacctg tgactggttg gcttttgcat 420
tctatggagg gagatggggt taaagactgt ggcaacacac accctccaga agagctggga 480
ccagagactg tcagcacaga aaggacaatg tcttttttag tagctgtggc agacttgagt 540
tgctgtaatt tatacaaatt gtttagaatg gtttttaaga ctaagaaggg aaatatactt 600
attgcacaag acttttataa ttactatact taaattatgc tctatgtggg gatcc
<210> 242
<211> 201
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (3)...(25)
<223> Xaa = any amino acid
<400> 242
Leu Ile Xaa Gln Glu Arg Arg Gly Leu Arg Ser Gly His Leu Arg
                                    10
                                                         15
 1
Ala Thr Xaa Phe Asp Xaa Arg Pro Xaa Ala Pro Pro Leu Lys Val Ser
                                                     30
                                25
Asp Leu Asn Arg Pro Ser Trp Arg Thr Ser Phe Leu Ser Gly Pro Trp
        35
                            40
                                                 45
```

```
Asp Ile Ala Ser Gln Val Pro Leu Tyr Leu Cys Leu Ala Cys Ser Leu
Ala Asp Thr Leu Pro Gly Ser Ala Gln Gln Arg Leu Ser Ile Ser Ile
Gln Leu Leu Ala Val Cys Leu Ser His Ser Gly Leu Cys Leu Gly Tyr
                                     90
Phe Arg Leu Ser Gly Glu Asp Asn Leu Val Thr Cys Val Cys Gly His
                                                     110
            100
                                 105
Ser Asn Phe Leu Phe Gly Asn Leu Leu Val Gly Phe Cys Ile Leu Trp
                             120
                                                 125
Arg Glu Met Gly Leu Lys Thr Val Ala Thr His Thr Leu Gln Lys Ser
                        135
                                             140
Trp Asp Gln Arg Leu Ser Ala Gln Lys Gly Gln Cys Leu Phe Leu Trp
                                         155
                    150
Gln Thr Val Ala Val Ile Tyr Thr Asn Cys Leu Glu Trp Phe Leu Arg
                                     170
                165
Leu Arg Arg Glu Ile Tyr Leu Leu His Lys Thr Phe Ile Ile Thr Ile
                                 185
                                                     190
            180
Leu Lys Leu Cys Ser Met Trp Gly Ser
        195
<210> 243
<211> 677
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (1)...(1)
\langle 223 \rangle n = A, C, G or T
<400> 243
ncgctgtagt ttcatttctc actttgaggg cacagatgaa aatgtatatc gcaacacagt 60
ggatatcage ceaageacga agaceatget gaacatgeac cegtacagag tgtaettaaa 120
ggagtcgtca taagggcact gggagccatt ggagcttacc attgtcaggc agtgcagctt 180
acaggaggcc ttttgtccgc agcgcttgat cgatcgcctt tgctattcag atgtggtcac 240
agcagcagcc agtttatttg caaagtattt gtttcttttc ctgttcttac aaatactttc 300
ttctcttaac tcttcaaagg aaacatgaaa tgtgttccgt aaaagtttct agtagattat 360
tcaggaaaat agtctgattt tctggtcgag aaaatccatg agtctggagt ttagttaact 420
gacagaaaat gcagtcaagg aagccaaccc ataaagctga aagtgtaagg aaaaactgtt 480
ccaagtcgga ccagaccagt ccgcgtggaa acttgtgctt cagccgccag ggtccaaacc 540
agetttaett cagteacaaa cactegeegt gegteegtee geeegtegte etegggtaet 600
tcttccttct ttttattctc aaactttgta tttctacatt gattccggac ggcgataggc 660
                                                                    677
agtcgtttaa gggatcc
<210> 244
<211> 219
<212> PRT
```

```
<400> 244
Ala Val Val Ser Phe Leu Thr Leu Arq Ala Gln Met Lys Met Tyr Ile
Ala Thr Gln Trp Ile Ser Ala Gln Ala Arg Arg Pro Cys Thr Cys Thr
                                 25
Arg Thr Glu Cys Thr Arg Ser Arg His Lys Gly Thr Gly Ser His Trp
                             40
Ser Leu Pro Leu Ser Gly Ser Ala Ala Tyr Arg Arg Pro Phe Val Arg
                         55
Ser Ala Ser Ile Ala Phe Ala Ile Gln Met Trp Ser Gln Gln Pro
                                         75
Val Tyr Leu Gln Ser Ile Cys Phe Phe Ser Cys Ser Tyr Lys Tyr Phe
Leu Leu Thr Leu Gln Arg Lys His Glu Met Cys Ser Val Lys Val
                                 105
                                                     110
Ser Ser Arg Leu Phe Arg Lys Ile Val Phe Ser Gly Arg Glu Asn Pro
                            120
                                                 125
Val Trp Ser Leu Val Asn Gln Lys Met Gln Ser Arg Lys Pro Thr His
                        135
Lys Ala Glu Ser Val Arg Lys Asn Cys Ser Lys Ser Asp Gln Thr Ser
                    150
                                         155
Pro Arg Gly Asn Leu Cys Phe Ser Arg Gln Gly Pro Asn Gln Leu Tyr
                165
                                     170
                                                         175
Phe Ser His Lys His Ser Pro Cys Val Arg Pro Pro Val Val Leu Gly
                                 185
            180
                                                     190
Tyr Phe Phe Leu Leu Phe Ile Leu Lys Leu Cys Ile Ser Thr Leu Ile
                            200 ...
                                                 205
Pro Asp Gly Asp Arg Gln Ser Phe Lys Gly Ser
    210
                        215
<210> 245
<211> 660
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (7)...(45)
<223> n = A, C, G or T
<400> 245
agagatncaa totaaaaago agatantgag cagagactan ggagnagtta acatactaaa 60
ccgctacata cataggacaa atgccatttg gaggctgaag tcaaggaaac atcagtatac 120
atgtaagttt ggcattgtat ttggttgcga ttaaatggaa agggcttttg tactqagttg 180
agatcttatc tcctagataa tagagtgtat tgggtttgaa taggaagtgt catggacaga 240
gctctgagcc tgtaggagca aggagtatca caaaggctct ttgccacagc ccaggcaagc 300
aatctagagc ttaagcctag ggtggcagat gtgtggaaga acacagacac agttgtgcag 360
agcctgggaa acggcttggg cttccaggga agaggtttat gttatcgttg tttgggttgg 420
```

```
atgtagccag gatggccttg aactcactat gtagctcaga ctgacgtgga attccaggtt 540
ctctctttac tccccacact ggtagctgtg caccataaaa cctggcttat actttgtaaa 600
ateceaatat tetettgett gettteagea eeettateae atgtgtggat tetgggatee 660
<210> 246
<211> 211
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (3)...(14)
<223> Xaa = any amino acid
<400> 246
Arq Asp Xaa Ile Lys Ala Asp Xaa Glu Gln Arg Leu Xaa Xaa Ser His
Thr Lys Pro Leu His Thr Asp Lys Cys His Leu Glu Ala Glu Val Lys
                                 25
Glu Thr Ser Val Tyr Met Val Trp His Cys Ile Trp Leu Arg Leu Asn
Gly Lys Gly Phe Cys Thr Glu Leu Arg Ser Tyr Leu Leu Asp Asn Arg
                        55
Val Tyr Trp Val Ile Gly Ser Val Met Asp Arg Ala Leu Ser Leu Glu
                                         75
Gln Gly Val Ser Gln Arg Leu Phe Ala Thr Ala Gln Ala Ser Asn Leu
                                     90
Glu Leu Lys Pro Arg Val Ala Asp Val Trp Lys Asn Thr Asp Thr Val
            100
                                 105
                                                     110
Val Gln Ser Leu Gly Asn Gly Leu Gly Phe Gln Gly Arg Gly Leu Cys
                            120
                                                 125
Tyr Arg Cys Leu Gly Trp Val Val Tyr Phe Trp Gly Leu Gly Glu Gly
                        135
Arg Tyr Val Cys Phe Val Val Tyr Leu Met Pro Gly Trp Pro Thr His
                    150
                                         155
Tyr Val Ala Gln Thr Asp Val Glu Phe Gln Val Leu Ser Leu Leu Pro
                165
                                     170
Thr Leu Val Ala Val His His Lys Thr Trp Leu Ile Leu Cys Lys Ile
                                 185
                                                     190
Pro Ile Phe Ser Cys Leu Leu Ser Ala Pro Leu Ser His Val Trp Ile
                            200
                                                 205
Leu Gly Ser
```

gttgtttatt tctgggggct gggggaggga aggtatgtat gttttgttgt ttagtatctc 480

<210> 247 <211> 673

210

<212> DNA

```
<213> Mus musculus
<220>
<221> unsure
<222> (4)...(173)
<223> n = A, C, G or T
<400> 247
gttnnnnncc nttnnnnnna anttnttnnn aatnaaaaag nanantaann nnanntnnnn 60
nengnttnnn eccennttee nnnnnnetan gnnnengget tnannntggn gttantngnn 120
ntggtaatac nnggggccaa gentgentgt gtaaagcaag necetnantg agntteteet 180
catcageggg gttcagacet ggctggtttg taggtacact agccaegate agcaeaagte 240
acaagtgcca ctcacttaca cccatcccc cagcctaaaa ctttctccta aggtgccaag 300
ggatcagtca gtctgaagga tgaaaaccag agcgtggtgt acagctctcc ccttcaaact 360
gaagccaccc tgggggacgg gggtatcgtt atcccacgtt taaccataaa tagggtcctg 420
atgaaaaggg ggaaggaaaa aaagactact ctaacagcaa atttttcttt tttaggttta 480
aaactcttgc taaaattcct agtgaatcag tgctttggaa taaaagtatc ataagccaat 540
gccacaggta tcatacgcta atgtcaggga ggtgctatgg gtgtcctttt gttgctgttt 600
tgttctgttt tctttcctat gtcaatgtgg cttcacaagt gtgggatttc aagaggtgaa 660
                                                                673
gatacatgga tcc
<210> 248
<211> 210
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (1)...(56)
<223> Xaa = any amino acid
<400> 248
10
Xaa Xaa Xaa Xaa Xaa Xaa Aaa Pro Xaa Phe Xaa Xaa Xaa Xaa Xaa
                               25
Ala Xaa Xaa Trp Xaa Xaa Xaa Xaa Trp Tyr Xaa Gly Pro Ser Xaa Xaa
                           40
Val Ser Lys Xaa Leu Xaa Glu Xaa Leu Leu Ile Ser Gly Val Gln Thr
                       55
Trp Leu Val Cys Arg Tyr Thr Ser His Asp Gln His Lys Ser Gln Val
                   70
                                       75
Pro Leu Thr Tyr Thr His Pro Pro Ser Leu Lys Leu Ser Pro Lys Val
                                   90
               85
Pro Arg Asp Gln Ser Val Arg Met Lys Thr Arg Ala Trp Cys Thr Ala
                                                   110
                               105
Leu Pro Phe Lys Leu Lys Pro Pro Trp Gly Thr Gly Val Ser Leu Ser
                           120
His Val Pro Ile Gly Ser Lys Gly Gly Arg Lys Lys Arg Leu Leu Gln
                                           140
    130
                       135
```

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Gln Ile Phe Leu Phe Val Asn Ser Cys Asn Ser Ile Ser Ala Leu Glu
145
                    150
                                         155
Lys Tyr His Lys Pro Met Pro Gln Val Ser Tyr Ala Asn Val Arg Glu
                165
                                     170
Val Leu Trp Val Ser Phe Cys Cys Cys Phe Val Leu Phe Ser Phe Leu
                                                     190
                                 185
Cys Gln Cys Gly Phe Thr Ser Val Gly Phe Gln Glu Val Lys Ile His
                                                 205
                            200
        195
Gly Ser
    210
<210> 249
<211> 656
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (2)...(68)
\langle 223 \rangle n = A, C, G, or T
<400> 249
anaattegeg neggegtega egectaacea aaaacaegg teagttttgg agaceeteae 60
acagatentg gaatgagate tgeageeagg tgtecageee aggettggge tteteattgt 120
acccaagget ggaagggttt ggtctgtact aacacacaag ctcgcagtcc tgcttgactg 180
ctggcttccc aaagaggaga cattggtctt gctgggaggc acagcaggag agtgacccac 240
tgccactgca ctctaactga gtactaaggc cactagggct ttctagacct cgctttcccc 300
ttgagcttcc tggggaggtg aagtgaggtg tgtgtgtgt tgtgtgtctt tgtgtgctta 360
gatttattgc agggaaaggt ctaatccaga atcagtattc aggctttgtc atgttgtatc 420
agtgccaagg tgaccctcaa ggtcatgtaa cttaagcaaa gcttagcatt tattttattc 480
ctgaaaactt aagtatttta cttttttgtg tgttcgtgga gacatttgca gtattaatga 540
ttttattttt cctaaatcgg gatggaaaca aacttttcca ggttatgtta ataagccact 600
                                                                   656
taaqtqcctt aaacaqcttt qqtqtaqatq aqaattqctq qqtccqtcat ggatcc
<210> 250
<211> 214
<212> PRT
<213> Mus musculus
<400> 250
Asn Ser Arg Arg Arg Arg Leu Thr Lys Asn Thr Gly Gln Phe Trp
                                                         15
                                     10
 1
Arg Pro Ser His Arg Ser Trp Asn Glu Ile Cys Ser Gln Val Ser Ser
                                 25
Pro Gly Leu Gly Phe Ser Leu Tyr Pro Arg Leu Glu Gly Phe Gly Leu
Tyr His Thr Ser Ser Gln Ser Cys Leu Thr Ala Gly Phe Pro Lys Arg
                        55
                                             60
Arg His Trp Ser Cys Trp Glu Ala Gln Glu Ser Asp Pro Leu Pro
```

```
80
                                        75
                    70
65
Leu His Ser Asn Val Leu Arg Pro Leu Gly Leu Ser Arg Pro Arg Phe
Pro Leu Glu Leu Pro Gly Glu Val Lys Gly Val Cys Val Cys
                                                     110
                                105
Leu Cys Val Leu Arg Phe Ile Ala Gly Lys Gly Leu Ile Gln Asn Gln
                                                 125
                            120
Tyr Ser Gly Phe Val Met Leu Tyr Gln Cys Gln Gly Asp Pro Gln Gly
                        135
His Val Thr Ala Lys Leu Ser Ile Tyr Phe Ile Pro Glu Asn Leu Ser
                                        155
                    150
Ile Leu Leu Phe Cys Val Phe Val Glu Thr Phe Ala Val Leu Met Ile
                                     170
                                                         175
                165
Leu Phe Phe Leu Asn Arg Asp Gly Asn Lys Leu Phe Gln Val Met Leu
                                                     190
                                185
Ile Ser His Leu Ser Ala Leu Asn Ser Phe Gly Val Asp Glu Asn Cys
                                                 205
                            200
Trp Val Arg His Gly Ser
    210
<210> 251
<211> 372
<212> DNA
<213> Mus musculus
<400> 251
gaattcgcgg ccgcgtcgac acagctttaa accccccatg ctcactgtaa ggttggggcg 60
ctctgtgaaa tccacacttg gcctcccaag agcttcctca cagcctggta agccttacac 120
tcgggtgaga tgagatgata tttgtgttta ctggtgcttc gtttttcttt atgggtcgct 180
tagaatttgt cccactctgt ttgtagtgct ggctgtactg atgtggaaga gaaagttatg 240
cagteteaat ettettatge acageatete tgeetgaett tgtggtgeet etgttttgtg 300
cacatgcaca tgtgttcagt gttggcattg ggaatggcta tgtgcttcac caccgcttag 360
                                                                   372
qcctqgggat cc
<210> 252
<211> 211
<212> PRT
<213> Mus musculus
<400> 252
Gly Gln Gly Ala His Ala Gly Arg Gly Gly Ser Ser Pro Met Ala
                                                         15
                                     10
Met Pro Ala Cys Arg Ile Ser Trp Lys Trp Pro Leu Phe Trp Ile His
                                 25
Arg Leu Cys Arg Leu Gly Gly Arg Thr Ala Ile Arg Thr Arg Trp Leu
Pro Val Ile Leu Arg Ala Trp Arg Arg Met Gly Pro Leu Pro Arg Ala
                         55
Leu Arg Tyr Arg Arg Ser Arg Phe Ala Ala His Arg Leu Leu Ser Pro
```

```
80
                    70
                                         75
Ser Arg Val Leu Leu Asn Lys Arg Lys Ser Lys Leu Glu Phe Ala Ala
                                     90
                85
Ala Ser Thr Gln Leu Thr Pro His Ala His Cys Lys Val Gly Ala Leu
                                                     110
                                105
            100
Cys Glu Ile His Thr Trp Pro Pro Lys Ser Phe Leu Thr Ala Trp Ala
                            120
Leu His Ser Gly Glu Met Arg Tyr Leu Cys Leu Leu Val Leu Arg Phe
                                             140
                        135
Ser Leu Trp Val Ala Asn Leu Ser His Ser Val Cys Ser Ala Gly Cys
                                         155
                    150
Thr Asp Val Glu Glu Lys Val Met Gln Ser Gln Ser Ser Tyr Ala Gln
                165
                                     170
His Leu Cys Leu Thr Leu Trp Cys Leu Cys Phe Val His Met His Met
                                                     190
                                185
Cys Ser Val Leu Ala Leu Gly Met Ala Met Cys Phe Thr Thr Ala Ala
                                                 205
                            200
Trp Gly Ser
    210
<210> 253
<211> 689
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (62)...(85)
<223> n = A, C, G, or T
<400> 253
aggtaagtag tgttgactta cattaagcgc ctacatcgat ttctttcatt gaagaatata 60
cntctagtga tttttacctg gggcnttttt tgagagtgag ggtataggtg acaggtagga 120
ggagtggctg tgataagggt gactgctggt cctcctgaag ctattgatca tgccccaaga 180
agctgatgac caccatgtgt cattgaatat aaaccttggg gtttagtgag acttttgaag 240
ttaattccaa tttacctaac agactttgga tttgaagaga ctttaaatct gtctcttatt 300
acttttgtgt tttgatgtct tttcagtaat gtatcttttg tgagttaccc tagttacaaa 360
gtacctgagt aacagagtac cttcgagaca gagtacccta gtaacagagt accctagtaa 420
caqaqtaccc tagagacaqt acctcagtga cagagtaccc tagtgacaga tgaccctagt 480
gacaggttac ctagttacag gttaccctag tgacattgtt atgttatctt tgaagataaa 540
atagttctgt gctacatgtc tttaaataat aggttaagaa ttgttctaga aatttacata 600
atgatttgca tagattagct cccatctttg ttttattcct ttgttgtttg tttgagagaa 660
                                                                    689
gctttctgct acatcgccag agcggatcc
<210> 254
<211> 209
<212> PRT
<213> Mus musculus
```

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<220>
<221> UNSURE
<222> (27)...(27)
<223> Xaa = any amino acid
<400> 254
Val Ser Ser Val Asp Leu His Ala Pro Thr Ser Ile Ser Phe Ile Glu
                                     10
Glu Tyr Thr Ser Ser Asp Phe Tyr Leu Gly Xaa Phe Leu Arg Val Arg
                                 25
Val Val Thr Gly Arg Arg Ser Gly Cys Asp Lys Gly Asp Cys Trp Ser
                             40
Ser Ser Tyr Ser Cys Pro Lys Lys Leu Met Thr Thr Met Cys His Ile
Thr Leu Gly Phe Ser Glu Thr Phe Glu Val Asn Ser Asn Leu Pro Asn
                     70
                                         75
Arg Leu Trp Ile Arg Asp Phe Lys Ser Val Ser Tyr Tyr Phe Cys Val
                 85
                                     90
Leu Met Ser Phe Gln Cys Ile Phe Cys Glu Leu Pro Leu Gln Ser Thr
            100
                                 105
Val Thr Glu Tyr Leu Arg Asp Arg Val Pro Gln Ser Thr Leu Val Thr
        115
                             120
                                                  125
Glu Tyr Pro Arg Asp Ser Thr Ser Val Thr Glu Tyr Pro Ser Asp Arg
                         135
                                             140
Pro Gln Val Thr Leu Gln Val Thr Leu Val Thr Leu Leu Cys Tyr Leu
                     150
                                         155
                                                              160
Arg Asn Ser Ser Val Leu His Val Phe Lys Val Lys Asn Cys Ser Arg
                165
                                     170
                                                          175
Asn Leu His Asn Asp Leu His Arg Leu Ala Pro Ile Phe Val Leu Phe
                                 185
                                                      190
Leu Cys Cys Leu Phe Glu Arg Ser Phe Leu Leu His Arg Gln Ser Gly
        195
                             200
                                                 205
Ser
<210> 255
<211> 668
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (41)...(151)
<223> n = A, C, G or T
<400> 255
gatcaaagaa ggggccttca agaacctgaa ggacttgcat ncnttgatcc nttgtcanca 60
acaagatcag caaaatcagt ccagaggcat tcaaacctct ngtgaagttg gaaaggcttt 120
acctgtttaa gaaccaacta aaggaactgc ntgaaaaaat gcccagaact ctccaggaac 180
```

```
ttcgtgtcca tgagaatgag atcaccaagc tgcggaaatc cgacttcaat ggactgaaca 240
atgtgcttgt catagaactg ggcggcaacc cactgaaaaa ctctgggatt gaaaacggag 300
ccttccaggg actgaagagt ctctcataca ttcgcatctc agacaccaac ataactgcga 360
tccctcaagg tctgcctact tctctcactg aagtgcatct agatggcaac aagatcacca 420
aggttgatgc acccagcctg aaaggactga ttaatttgtc taaactggga ttgagcttca 480
acagcatcac cgttatggag aatggcagtc tggccaatgt tcctcatctg agggaactcc 540
acttggacaa caacaaactc ctcagggtgc ctgctgggct ggcacagcat aagtatatcc 600
aggtcgtcta ccttcacaac aacaacatct ccgcagttgg gcaaaatgac ttctgccaag 660
ctggatcc
<210> 256
<211> 220
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (12)...(48)
<223> Xaa = any amino acid
<400> 256
Ser Lys Lys Gly Pro Ser Arg Thr Arg Thr Cys Xaa Xaa Ser Xaa Val
                                     10
Xaa Asn Lys Ile Ser Lys Ile Ser Pro Glu Ala Phe Lys Pro Leu Val
                                 25
Lys Leu Glu Arg Leu Tyr Leu Phe Lys Asn Gln Leu Lys Glu Leu Xaa
                             40
Glu Lys Met Pro Arg Thr Leu Gln Glu Leu Arg Val His Glu Asn Glu
                         55
Ile Thr Lys Leu Arg Lys Ser Asp Phe Asn Gly Leu Asn Asn Val Leu
                    70
                                         75
Val Ile Glu Leu Gly Gly Asn Pro Leu Lys Asn Ser Gly Ile Glu Asn
Gly Ala Phe Gln Gly Leu Lys Ser Leu Ser Tyr Ile Arg Ile Ser Asp
            100
                                 105
                                                     110
Thr Asn Ile Thr Ala Ile Pro Gln Gly Leu Pro Thr Ser Leu Thr Glu
                             120
Val His Leu Asp Gly Asn Lys Ile Thr Lys Val Asp Ala Pro Ser Leu
                        135
                                             140
Lys Gly Leu Ile Asn Leu Ser Lys Leu Gly Leu Ser Phe Asn Ser Ile
145
                    150
                                         155
                                                             160
Thr Val Met Glu Asn Gly Ser Leu Ala Asn Val Pro His Leu Arg Glu
                165
                                     170
Leu His Leu Asp Asn Asn Lys Leu Leu Arg Val Pro Ala Gly Leu Ala
                                185
Gln His Lys Tyr Ile Gln Val Val Tyr Leu His Asn Asn Asn Ile Ser
                            200
                                                 205
Ala Val Gly Gln Asn Asp Phe Cys Gln Ala Gly Ser
    210
                        215
                                             220
```

```
<210> 257
<211> 692
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (64)...(67)
<223> n = A, C, G or T
<400> 257
gactacatag gaaacgaagt ctcgaaatcc aacaataaac tcctcctcct cctcctcctc 60
cttnttntat ctcttcatat tgtaaagatc ttgtgataaa agtgtttttg cttcctggat 120
tagttttatg tttaaggtta aacttgttgc ttttcccctg atttatttct gagcaagttc 180
attagtatat gtggaaacgt tcctgatttg tgtatgttga aattgtatcc tgttacttta 240
cccaaaqtat ttattatatc taggactttt ctagttgatt ttccaagtct tttgcttttg 300
tgtataggat tacattgtct caaagtaggg ccaattttcc cttgcctttt ctattttat 360
cccttttctt tccctgcctt atccctctaa gacatcaagc atcatcctga gtaagaaggg 420
aagaggacct cttctctcat tcctqctttt cttattqaat gtaqcattqa ctacaqttct 480
gtcagctata acttttattg tgttaacgta cattcttttg atgcttgtgt cacctgggct 540
tttatcagga aatgatgttg aaattaataa agaggtcttt cctcagctgc tcagacagcc 600
tctqttqqaq tctatctata tqcatcctca cqtqtattqa tttqtqtatq ttqaatcacc 660
tqtqcatccc tqqaatqaaa qtaactqqat cc
                                                                   692
<210> 258
<211> 217
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (20)...(21)
<223> Xaa = Any amino acid
<400> 258
Leu His Arg Lys Arg Ser Leu Glu Ile Gln Gln Thr Pro Pro Pro
 1
                 5
                                    10
Pro Pro Pro Xaa Xaa Ile Ser Ser Tyr Cys Lys Asp Leu Val Ile Lys
                                25
Val Phe Leu Leu Pro Gly Leu Val Leu Cys Leu Arg Leu Asn Leu Leu
Leu Phe Pro Phe Ile Ser Glu Gln Val His Tyr Met Trp Lys Arg Ser
Phe Val Tyr Val Glu Ile Val Ser Cys Tyr Phe Thr Gln Ser Ile Tyr
                    70
                                        75
                                                             80
Tyr Ile Asp Phe Ser Ser Phe Ser Lys Ser Phe Ala Phe Val Tyr Arg
                                    90
Ile Thr Leu Ser Gln Ser Arg Ala Asn Phe Pro Leu Pro Phe Leu Phe
            100
                                105
```

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Leu Ser Leu Phe Phe Pro Cys Leu Ile Pro Leu Arg His Gln Ala Ser
        115
                            120
Ser Val Arg Arg Glu Glu Asp Leu Phe Ser His Ser Cys Phe Ser Tyr
                        135
Met His Leu Gln Phe Cys Gln Leu Leu Leu Cys Arg Thr Phe Phe
                                         155
                    150
Cys Leu Cys His Leu Gly Phe Tyr Gln Glu Met Met Leu Lys Leu Ile
                                     170
                                                         175
                165
Lys Arg Ser Phe Leu Ser Cys Ser Asp Ser Leu Cys Trp Ser Leu Ser
                                 185
                                                     190
            180
Ile Cys Ile Leu Thr Cys Ile Asp Leu Cys Met Leu Asn His Leu Cys
                            200
Ile Pro Gly Met Lys Val Thr Gly Ser
    210
                        215
<210> 259
<211> 705
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (648)...(648)
<223> n = A, C, G or T
<400> 259
cttcagcatc ttttactttc accagcgttt ctgggtggga tcccagggtg cggatctcaa 60
gctggttgtg agagttggtg ttcaaaccac ggttgtaaac gttaaccacc gctggcgcqq 120
cgcggcgaac cgccagatta tagctggcag gcgtctcatc ggtactgtca aattgcggag 180
tggaaagcgg gttaaggctg cgcagcgaag gcatggcaac cagcagaata gcgccgacaa 240
ttaatccaat cgcaacggaa cgtaagagct tcacaaacat gatggaggcg tcattaaaaa 300
agggaacggc agcagcatac cacgagttaa ccggacatca cacgtaagcc tgatgcccgg 360
tttacgacat taacgcatca gcagatagat gctttcattg ccgcgtacaa tttgcagggc 420
gatgatggcc ggttttgccg ccagcacttt acgcatttca gcaatcgagt tcacccgatc 480
gcggttgacg ccaatgatca catcgtcttt ttgcaagcca gcctgagcag ctgggcttct 540
ttgacaactt catcgatttt aatacetttg cegecatett ttactgacca tegetcaacg 600
ttgcaccttc cagcgctggc gtgatcattt cagcgctggc cgacgaanaa gtgctggtat 660
cgagcgtcac ttctactttc cagtggtttg ccgttacgca caagc
                                                                   705
<210> 260
<211> 216
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (19)...(19)
<223> Xaa = Any amino acid
```

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<400> 260
Leu Cys Val Thr Ala Asn His Trp Lys Val Glu Val Thr Leu Asp Thr
                                     10
Ser Thr Xaa Ser Ser Ala Ser Ala Glu Met Ile Thr Pro Ala Leu Glu
                                 25
Gly Ala Thr Leu Ser Asp Gly Gln Lys Met Ala Ala Lys Val Leu Lys
                            40
Ser Met Lys Leu Ser Lys Lys Pro Ser Cys Ser Gly Trp Leu Ala Lys
Arg Arg Cys Asp His Trp Arg Gln Pro Arg Ser Gly Glu Leu Asp Cys
                                         75
                    70
Asn Ala Ser Ala Gly Gly Lys Thr Gly His His Arg Pro Ala Asn Cys
                                     90
                85
Thr Arg Gln Lys His Leu Ser Ala Asp Ala Leu Met Ser Thr Gly His
                                                     110
            100
                                105
Gln Ala Tyr Val Cys Pro Val Asn Ser Trp Tyr Ala Ala Ala Val Pro
                                                 125
                            120
Phe Phe Asn Asp Ala Ser Ile Met Phe Val Lys Leu Leu Arg Ser Val
                                             140
                        135
Ala Ile Gly Leu Ile Val Gly Ala Ile Leu Leu Val Ala Met Pro Ser
                                                             160
                                         155
                    150
Leu Arg Ser Leu Asn Pro Leu Ser Thr Pro Gln Phe Asp Ser Thr Asp
                                     170
                                                         175
                165
Glu Thr Pro Ala Ser Tyr Asn Leu Ala Val Arg Arg Ala Ala Pro Ala
                                185
            180
Val Val Asn Val Tyr Asn Arg Gly Leu Asn Thr Asn Ser His Asn Gln
                                                 205
                            200
Leu Glu Ile Arg Thr Leu Gly Ser
    210
                        215
<210> 261
<211> 685
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (1)...(295)
<223> n = A, C, G or T
<400> 261
ncatteetga aggaceecae negatgettt ttaantaaca agtntgeage cattgntgnt 60
ctgcgcgagg agtccacacc tcagtcgcct ctgccacgtc tgttgccaca aagaagacag 120
agcaaggccc accatcctcc gagtacattt ttgaacggga atctaaatat ggtgcacaca 180
attaccatcc tttqcctqta qccctqgaga gaggaaaagg catttatatg tgggatgtgg 240
aaggcaggca gtacttcgat ttcctgagtg cttatggtgc tgtcagccaa ggacnctgcc 300
acccaaagat catagatgcc atgaagagtc aggtggacaa gctgacatta acatctcggg 360
ctttctataa caatgtcctt ggtgaatacg aggagtacat caccaagctt ttcaactaca 420
acaaagttct ccctatgaat acaggagtgg aggctggaga gactgcatgt aagctcgctc 480
```

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gtcgttgggg ctacaccgtg aaaggcatcc agaaatacaa agcaaagatt gtttttgctg 540
atgggaactt ttggggtcga acactatctg caatctccag ttccacagat ccgaccagtt 600
atgatggett tggaccette atgecagget ttgaaaccat cecatataac gatetgeeeg 660
cactggagcg tgctcttcag gatcc
<210> 262
<211> 217
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (6)...(18)
<223> Xaa = Any amino acid
<400> 262
His Ser Arg Thr Pro Xaa Asp Ala Phe Xaa Thr Ser Xaa Gln Pro Leu
                                     10
Xaa Xaa Cys Ala Arg Ser Pro His Leu Ser Arg Leu Cys His Val Cys
                                 25
Cys His Lys Glu Asp Arg Ala Arg Pro Thr Ile Leu Arg Val His Phe
                             40
Thr Gly Ile Ile Trp Cys Thr Gln Leu Pro Ser Phe Ala Cys Ser Pro
                        55
                                             60
Gly Glu Arg Lys Arg His Leu Tyr Val Gly Cys Gly Arg Gln Ala Val
                    70
                                         75
                                                              80
Leu Arg Phe Pro Glu Cys Leu Trp Cys Cys Gln Pro Arg Thr Leu Pro
                                     90
                                                         95
Pro Lys Asp His Arg Cys His Glu Glu Ser Gly Gly Gln Ala Asp Ile
            100
                                 105
Asn Ile Ser Gly Phe Leu Gln Cys Pro Trp Ile Arg Gly Val His His
                             120
Gln Ala Phe Gln Leu Gln Gln Ser Ser Pro Tyr Glu Tyr Arg Ser Gly
                        135
                                             140
Gly Trp Arg Asp Cys Met Ala Arg Ser Ser Leu Gly Leu His Arg Glu
145
                    150
                                         155
Arg His Pro Glu Ile Gln Ser Lys Asp Cys Phe Cys Trp Glu Leu Leu
                165
                                     170
Gly Ser Asn Thr Ile Cys Asn Leu Gln Phe His Arg Ser Asp Gln Leu
            180
                                 185
                                                     190
Trp Leu Trp Thr Leu His Ala Arg Leu Asn His Pro Ile Arg Ser Ala
                            200
                                                 205
Arg Thr Gly Ala Cys Ser Ser Gly Ser
    210
                        215
<210> 263
<211> 702
```

<212> DNA

<213> Mus musculus

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<220>
<221> unsure
<222> (651)...(699)
<223> n = A, C, G, or T
<400> 263
cttagcatct tttactttca ccagcgtttc tgggtgggat ccagggaatc ctgcagttcc 60
aggagggcca gggggaccag gttgcccatc actgccccga gcaccatcat tgcctcgagc 120
acctgcaget ccaggaagge ctggtcgtcc tcgctcacca ggagcccctc taggacccat 180
ggggccagga gctccgttgt ctcctggaag accattttca cccttcagtc caggagcacc 240
tgtttctccc ttttctccat tgcgtccatc aaagcctctg tgtcctttca taccagggaa 300
tccaggcatg ccagctgggc ctttgatacc tggaggtcca ggcagtccac gctctccagg 360
tegtecaggt ettectgact etecateett teeageagga ecagetggae caagageace 420
aggaggteet ggagggeetg etggaeeage ttgaeeaggt teaceagggg gaeettggta 480
tccaggagaa ccaggagatc caggatgtcc agaagaacca gggggtcctg gagggcctgg 540
tggaccagct ggtcccggat agccacccat tcttccactt cagacttgac atcatatgag 600
tcgaattggg gagaataatt ttggccacca gttggacatg attacagatt ncangggagc 660
                                                                   702
caggaageee anggagaeet ggttgteetg gaanggeang gt
<210> 264
<211> 220
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (2)...(18)
<223> Xaa = Any amino acid
<400> 264
Thr Xaa Pro Phe Gln Asp Asn Gln Val Ser Xaa Gly Phe Leu Ala Pro
                                     10
1
Xaa Xaa Ser Val Ile Met Ser Asn Trp Trp Pro Lys Leu Phe Ser Pro
                                25
Ile Arg Leu Ile Cys Gln Val Ser Gly Arg Met Gly Gly Tyr Pro Gly
Pro Ala Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Ser Ser Gly His
                        55
Pro Gly Ser Pro Gly Ser Pro Gly Tyr Gln Gly Pro Pro Gly Glu Pro
                                                             80
                    70
                                         75
Gly Gln Ala Gly Pro Ala Gly Pro Pro Gly Pro Pro Gly Ala Leu Gly
                                     90
Pro Ala Gly Pro Ala Gly Lys Asp Gly Glu Ser Gly Arg Pro Gly Arg
                                105
                                                     110
Pro Gly Glu Arg Gly Leu Pro Gly Pro Pro Gly Ile Lys Gly Pro Ala
                            120
Gly Met Pro Gly Phe Pro Gly Met Lys Gly His Arg Gly Phe Asp Gly
                                             140
                        135
Arg Asn Gly Glu Lys Gly Glu Thr Gly Ala Pro Gly Leu Lys Gly Glu
```

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160
                    150
                                         155
145
Asn Gly Leu Pro Gly Asp Asn Gly Ala Pro Gly Pro Met Gly Pro Arg
                                     170
                165
Gly Ala Pro Gly Glu Arg Gly Arg Pro Gly Leu Pro Gly Ala Ala Gly
                                 185
                                                     190
            180
Ala Arg Gly Asn Asp Gly Ala Arg Gly Ser Asp Gly Gln Pro Gly Pro
                            200
Pro Gly Pro Pro Gly Thr Ala Gly Phe Pro Gly Ser
                                             220
                        215
<210> 265
<211> 691
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (19)...(187)
<223> n = A, C, G or T
<400> 265
tttctttgtt gctttaacnt atcaaggggt ttttgctctg cattcatgag tgcngttggg 60
tagtttttcc attgctcaca aagctttgtg tgtacaagga cttcaagaag cacggtgccc 120
aagaaagatt tgttgctctg accttttggg gatgtttatc ccatatcttt acgggctcta 180
cctcatntgg gctgtgtttg agatgttcac tcctatcctg gaaagaagcg ggtcggagat 240
ccccccqac gttgtgctgg cctccatcct ggctgtctgt gtgatgatcc tctcttccta 300
ttttattacc ttcatctacc ttgtgaacag cacaaagaaa accattctga ctctaatact 360
ggtgtgcgcg gtcaccttcc tccttgtctg cagtggagcc tttttcccat atagttctaa 420
tcccgagagt ccaaagccaa agagagtgtt tcttcagcac gtgagtagaa cttttcataa 480
cttagaagga agcgtagtaa aaagagactc tggaatatgg atcaatgggt ttgattatac 540
tggaatgtct cacgtaacac ctcacattcc tgagatcaac gacacaatcc gagctcactg 600
tgaggaggat geceeactet gtggetteee ttggtatett ceagtgeact teetgateag 660
gaaaaactgg tatcttccaa cccccggatc c
                                                                   691
<210> 266
<211> 229
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (17)...(61)
<223> Xaa = Any amino acid
<400> 266
Phe Phe Val Ala Leu Thr Tyr Gln Gly Val Phe Ala Leu His Ser Val
                                     10
Xaa Leu Gly Ser Phe Ser Ile Ala His Lys Ala Leu Cys Val Gln Gly
            20
                                 25
                                                     30
```

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Leu Gln Glu Ala Arg Cys Pro Arg Lys Ile Cys Cys Ser Asp Leu Leu
Gly Met Phe Ile Pro Tyr Leu Tyr Gly Leu Tyr Leu Xaa Trp Ala Val
                         55
Phe Glu Met Phe Thr Pro Ile Leu Glu Arg Ser Gly Ser Glu Ile Pro
                    70
                                         75
Pro Asp Val Val Leu Ala Ser Ile Leu Ala Val Cys Val Met Ile Leu
                85
                                     90
Ser Ser Tyr Phe Ile Thr Phe Ile Tyr Leu Val Asn Ser Thr Lys Lys
            100
                                 105
                                                      110
Thr Ile Leu Thr Leu Ile Leu Val Cys Ala Val Thr Phe Leu Leu Val
                             120
                                                 125
Cys Ser Gly Ala Phe Phe Pro Tyr Ser Ser Asn Pro Glu Ser Pro Lys
                         135
Pro Lys Arg Val Phe Leu Gln His Val Ser Arg Thr Phe His Asn Leu
                    150
                                         155
                                                              160
Glu Gly Ser Val Val Lys Arg Asp Ser Gly Ile Trp Ile Asn Gly Phe
                165
                                     170
                                                          175
Asp Tyr Thr Gly Met Ser His Val Thr Pro His Ile Pro Glu Ile Asn
            180
                                 185
Asp Thr Ile Arg Ala His Cys Glu Glu Asp Ala Pro Leu Cys Gly Phe
                             200
Pro Trp Tyr Leu Pro Val His Phe Leu Ile Arg Lys Asn Trp Tyr Leu
    210
                                             220
                        215
Pro Thr Pro Gly Ser
225
<210> 267
<211> 671
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (6)...(6)
\langle 223 \rangle n = A, C, G, or T
<400> 267
tgtttnacat attgttaaca tttttaaaaa gtgtgtgctt gtatgtatgt tgagggcatg 60
atatgtgcac aagaggcagg gcctgaaaag ggaggccagg agaaagtgtc agatacttac 120
agggggtcac aagcctcctg ttgtagggaa tcagccttgg atcttttgca agaaccatac 180
ttgaatttaa ctggagacat ctttccagtc cctagaaatt taattgtgat ttgagtgaag 240
gttgtcaaga ttttctgtta cctatgttaa actgagtctt tgtttgtttg tttcgcacgc 300
cctctttctt tttaagttag cgcacagagc ggtgtgtttt gtgatgacat ttgcttgtgt 360
agttattgct gtgctttttt cttaaacatc ctttccccaq ctgacttttt ttttcccctt 420
gctttttaat tttatatgga tttgtgtcat gatatcatgg aacgttgttg aaacactgga 480
atctagcctt ttgttttcta gattgagaac gtgaaatcca tgctaaatat ctactgacat 540
gtccacatct tgatgttggg gcagagctga gactcaaagt catcttattc aagtgtcatg 600
tgttctttat gataccatat tattaccttg tgcaatatgt aattttcatt ttgtgttttc 660
```

```
<210> 268
<211> 211
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (2)...(2)
<223> Xaa = Any amino acid
<400> 268
Phe Xaa Ile Leu Leu Thr Phe Leu Lys Ser Val Cys Leu Tyr Val Cys
                                     10
                                                         15
                 5
Gly His Asp Met Cys Thr Arg Gly Arg Ala Lys Gly Arg Pro Gly Glu
                                 25
Ser Val Arg Tyr Leu Gln Gly Val Thr Ser Leu Leu Leu Gly Ile Ser
Leu Gly Ser Phe Ala Arg Thr Ile Leu Glu Phe Asn Trp Arg His Leu
                         55
Ser Ser Pro Lys Phe Asn Cys Asp Leu Ser Glu Gly Cys Gln Asp Phe
                                         75
Leu Leu Pro Met Leu Asn Val Phe Val Cys Leu Phe Arg Thr Pro Ser
                                     90
Phe Phe Leu Ser Arg Thr Glu Arg Cys Val Leu His Leu Leu Val Leu
                                105
Leu Leu Cys Phe Phe Leu Lys His Pro Phe Pro Ser Leu Phe Phe Ser
        115
                            120
                                                 125
Pro Cys Phe Leu Ile Leu Tyr Gly Phe Val Ser Tyr His Gly Thr Leu
                        135
                                             140
Leu Lys His Trp Asn Leu Ala Phe Cys Phe Leu Asp Glu Arg Glu Ile
                    150
                                         155
                                                             160
His Ala Lys Tyr Leu Leu Thr Cys Pro His Leu Asp Val Gly Ala Glu
                165
                                     170
Leu Arg Leu Lys Val Ile Leu Phe Lys Cys His Val Phe Phe Met Ile
            180
                                185
                                                     190
Pro Tyr Tyr Leu Val Gln Tyr Val Ile Phe Ile Leu Cys Phe Pro
        195
                            200
                                                 205
Pro Gly Ser
    210
<210> 269
<211> 684
<212> DNA
```

<220>

<221> unsure

```
<222> (124)...(153)
<223> n = A, C, G or T
<400> 269
acctcagtga tgtgcaaggg tgatcaatga tcggtgagtc tctctcatct cagtgtgtgg 60
agtgcaagag tagagaactc agatgccaac taattcttga gcatggataa ccaaatttca 120
gggnaggagc cgttttcaat agctaaaagt gcntgagtta taatcacctt qtcacqtttt 180
ggttgggttc tgaatttgca taccaaccag agcatgaaca ccaqtccaca gcatatggca 240
gcaccaaaca aaatcactcc cacccattcc ttaaagtaag aaaaagcaga ggtaagccaa 300
gaggtaaagt ctccgagggt cactggttcc actctggtcc cattaaggct caggatctqc 360
atctgcagtc tcgtctgcaa cctttccagc tcctgcgacc agttcccctt caggtaactc 420
gataggtctg tacttttaat aaaagaatta ttaatatacc tattgggagt aatgcacaca 480
tgtaaaatat ccactctgat tcactaacat taaccctgag gtgatatgag aatccaccct 600
ttgcagggta agcaatgeet cagaegtttt ttetgetate tgaettatag tgtcageagt 660
attaatttga tctgccctgg atcc
                                                                 684
<210> 270
<211> 220
<212> PRT
<213> Mus musculus
<220>.
<221> UNSURE
<222> (40)...(40)
<223> Xaa = Any amino acid
<400> 270
Thr Ser Val Met Cys Lys Gly Asp Gln Ser Val Ser Leu Ser His Leu
Ser Val Trp Ser Ala Arg Val Glu Asn Ser Asp Ala Asn Phe Leu Ser
Met Asp Asn Gln Ile Ser Gly Xaa Glu Pro Phe Ser Ile Ala Lys Ser
Ala Val Ile Ile Thr Leu Ser Arg Phe Gly Trp Val Leu Asn Leu His
                       55
Thr Asn Gln Ser Met Asn Thr Ser Pro Gln His Met Ala Ala Pro Asn
                   70
                                       75
Lys Ile Thr Pro Thr His Ser Leu Lys Glu Lys Ala Glu Val Ser Gln
               85
                                   90
Glu Val Lys Ser Pro Arg Val Thr Gly Ser Thr Leu Val Pro Leu Arg
                               105
                                                   110
Leu Arg Ile Cys Ile Cys Ser Leu Val Cys Asn Leu Ser Ser Cys
                           120
                                               125
Asp Gln Phe Pro Phe Arg Leu Asp Arg Ser Val Leu Leu Ile Lys Glu
                       135
Leu Leu Ile Tyr Leu Leu Gly Val Met His Thr Cys Lys Val Asp Ala
                   150
                                       155
Thr Gln Leu Ile Cys Met Thr Ser Ile Ile Cys Ser Met Ser Cys Cys
               165
                                   170
```

```
Lys Ile Ser Thr Leu Ile His His Pro Gly Asp Met Arg Ile His Pro
                                                      190
Leu Gln Gly Lys Gln Cys Leu Arg Arg Phe Phe Cys Tyr Leu Thr Tyr
                             200
Ser Val Ser Ser Ile Asn Leu Ile Cys Pro Gly Ser
     210
                         215
<210> 271
<211> 703
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (610)...(695)
\langle 223 \rangle n = A, C, G or T
<400> 271
cttcagcatc ttttactttc accagcgttt ctgggtggga tcctgagcag gggctccagg 60
ggccccagga tgcccaggcc ccatgtgtgg ggcaggtctt ctgggtgtca caggcctgtg 120
attgctgggc ctctcctggg cagtggcccc cacacttagg agcaggatta tcacatactc 180
gttgacggat ctgggttcct ttggagcatg tgacagagca aggcccccag ggtccccact 240
cagaccagcc acccatctct ggacagcatg gctggtcctc acaggcctgt agctgccact 300
caagagttcc aggagccaca ttctcagagc actgaccacc tctgcccaca cagcgcctgt 360
gtcgcagctg ggacccctca gaacatgtaa ctgagcaggg cccccataag gaccatgctg 420
accattgtgg agacctgcat gcctgacaga ggccaccatc atgctcctgg aaggcatagg 480
cagcgttgag acagcagtct tctaccctga tgtctctccc aagtaggcct ttgcacctgc 540
cagaggactc ctcatactgg gtgaagcaaa gcacagggtc tgagcctgtg gctggcagga 600
taaccagtan cagcaggagc cactgagggg cttgcatttc ancangcatt ttgaacacta 660
tgtttctgca ctcctacaaa aaagangcgt cnacnccggc cgc
                                                                    703
<210> 272
<211> 221
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (19)...(31)
<223> Xaa = Any amino acid
<400> 272
Ala Ala Gly Val Asp Ala Ser Phe Leu Glu Cys Arg Asn Ile Val Phe
                                     10
Lys Met Xaa Xaa Glu Met Gln Ala Pro Gln Trp Leu Leu Xaa Leu
                                 25
                                                     30
Val Ile Leu Pro Ala Thr Gly Ser Asp Pro Val Leu Cys Phe Thr Gln
                             40
Tyr Glu Glu Ser Ser Gly Arg Cys Lys Gly Leu Leu Gly Arg Asp Ile
```

```
55
                                             60
Arg Val Glu Asp Cys Cys Leu Asn Ala Ala Tyr Ala Phe Gln Glu His
                    70
                                         75
Asp Gly Gly Leu Cys Gln Ala Cys Arg Ser Pro Gln Trp Ser Ala Trp
                                     90
Ser Leu Trp Gly Pro Cys Ser Val Thr Cys Ser Glu Gly Ser Gln Leu
                                 105
Arg His Arg Arg Cys Val Gly Arg Gly Gln Cys Ser Glu Asn Val
                             120
                                                 125
Ala Pro Gly Thr Leu Glu Trp Gln Leu Gln Ala Cys Glu Asp Gln Pro
                        135
Cys Cys Pro Glu Met Gly Gly Trp Ser Glu Trp Gly Pro Trp Gly Pro
                    150
                                         155
Cys Ser Val Thr Cys Ser Lys Gly Thr Gln Ile Arg Gln Arg Val Cys
                165
                                     170
                                                         175
Asp Asn Pro Ala Pro Lys Cys Gly Gly His Cys Pro Gly Glu Ala Gln
            180
                                 185
Gln Ser Gln Ala Cys Asp Thr Gln Lys Thr Cys Pro Thr His Gly Ala
                             200
                                                 205
Trp Ala Ser Trp Gly Pro Trp Ser Pro Cys Ser Gly Ser
    210
                        215
                                             220
<210> 273
<211> 685
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (10)...(79)
<223> n = A, C, G or T
<400> 273
aaaaaaagtn aagttggcct tgtgcgtaac ggccaaccca ctgaaagtag aagtgacggt 60
tcgataccag cactinting tcggccagcg ttgaaatgat cacqccagcg tggaaggtgc 120
aacgttgagc gatggtcagc taaaagatgg cggcaaaggt attaaaatcg atgaagttgt 180
caaagaagcc cagctgctca ggctggcttg caaaaagacg atgtgatcat tggcgtcaac 240
cgcgatcggg tgaactcgat tgctgaaatg cgtaaagtgc tgcggcaaaa ccggccatca 300
tcgccctgca aattgtacgc ggcaatgaaa gcatctatct gctgatgcgt taatgtcgta 360
aaccgggcat caggettacg tgtgatgtee ggttaacteg tggtatgetg etgeegttee 420
cttttttaat gacgcctcca tcatgtttgt gaagctctta cgttccgttg cgattggatt 480
aattgtcggc gctattctgc tggttgccat gccttcgctg cgcagcctta acccgctttc 540
cactccgcaa tttgacagta ccgatgagac gcctgccagc tataatctgg cggttcgccg 600
cgccgcgcca gcggtggtta acqtttacaa ccgtggtttg aacaccaact ctcacaacca 660
gcttgagatc cgcaccctgg gatcc
                                                                   685
<210> 274
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<211> 222 <212> PRT

```
<220>
<221> UNSURE
<222> (25)...(26)
<223> Xaa = Any amino acid
<400> 274
Lys Lys Val Lys Leu Ala Leu Cys Val Thr Ala Asn Pro Leu Lys Val
                                     10
                                                          15
Glu Val Thr Val Arg Tyr Gln His Xaa Xaa Val Gly Gln Arg Asn Asp
                                 25
His Ala Ser Val Glu Gly Ala Thr Leu Ser Asp Gly Gln Leu Lys Asp
Gly Gly Lys Gly Ile Lys Ile Asp Glu Val Val Lys Glu Ala Gln Leu
                        55
                                             60
Leu Arg Leu Ala Cys Lys Lys Thr Met Ser Leu Ala Ser Thr Ala Ile
                    70
Gly Thr Arg Leu Leu Lys Cys Val Lys Cys Cys Gly Lys Thr Gly His
                                     90
His Arg Pro Ala Asn Cys Thr Arg Gln Lys His Leu Ser Ala Asp Ala
                                 105
Leu Met Ser Thr Gly His Gln Ala Tyr Val Cys Pro Val Asn Ser Trp
        115
                            120
                                                 125
Tyr Ala Ala Ala Val Pro Phe Phe Asn Asp Ala Ser Ile Met Phe Val
                        135
                                             140
Lys Leu Leu Arg Ser Val Ala Ile Gly Leu Ile Val Gly Ala Ile Leu
                    150
                                       - 155
                                                              160
Leu Val Ala Met Pro Ser Leu Arg Ser Leu Asn Pro Leu Ser Thr Pro
                165
                                     170
Gln Phe Asp Ser Thr Asp Glu Thr Pro Ala Ser Tyr Asn Leu Ala Val
                                 185
                                                     190
Arg Arg Ala Ala Pro Ala Val Val Asn Val Tyr Asn Arg Gly Leu Asn
                            200
Thr Asn Ser His Asn Gln Leu Glu Ile Arg Thr Leu Gly Ser
    210
                        215
                                             220
<210> 275
<211> 703
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (656)...(698)
<223> n = A, C, G, or T
<400> 275
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cttcagcate ttttacttte accagegttt etgggtggga tecetgttee tgaetgtetg 60

<213> Mus musculus

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agatgaggct tagccaactc tgttcctgag tgaatctgcc cagcagatag ttaatagtaa 120
 tccacccata ggcaccttcc tcttgtccag tgatgatctt ggcaccctgg aagtcaaagg 180
 ggtagctctt aaggcttgtt gacactgcag ccaggacctc gtctgccgat tgttcgcttt 240
 ccattctaag caagcgcatg cctgctgtgg ctcccaggta gacaggagtc tggtgatgct 300
 tggatgttgg tatcagttcg gtggacagtt ccatgcattc gqccaggtac gcaccgattt 360
 catctgtttt ctgagcatat tttgagattc caggaccttt cacttggcat tcctctaact 420
 gctgcaccac ccctgtgtca ttctccttct cggccggcca cttgtagatg tacaggttgg 480
 tgtgagatga ccccgcatcc aacacaatcc catacttaac attttctggc aaaggtttgt 540
 tctgggtcag tcccacagca atcaaagcta tcacagccaa gatagaggtg aaaccaagga 600
 tgatcaagaa tatttttgga gcaaaatctc ttcaccttag aatcctttat atcttncata 660
aggggcaagc tttttggttc cttnctcttc ctcgctgnct tgg
                                                                    703
<210> 276
<211> 220
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (2)...(7)
<223> Xaa = Any amino acid
<400> 276
Pro Xaa Gln Arg Gly Arg Xaa Arg Asn Gln Lys Ala Cys Pro Leu Xaa
                                     10
Lys Ile Arg Ile Leu Arg Arg Asp Phe Ala Pro Lys Ile Phe Leu Ile
                                 25
Ile Leu Gly Phe Thr Ser Ile Leu Ala Val Ile Ala Leu Ile Ala Val
                             40
Gly Leu Thr Gln Asn Lys Pro Leu Pro Glu Asn Val Lys Tyr Gly Ile
                        55
Val Leu Asp Ala Gly Ser Ser His Thr Asn Leu Tyr Ile Tyr Lys Trp
65
                                         75
Pro Ala Glu Lys Glu Asn Asp Thr Gly Val Val Gln Gln Leu Glu Glu
                                     90
Cys Gln Val Lys Gly Pro Gly Ile Ser Lys Tyr Ala Gln Lys Thr Asp
                                 105
                                                     110
Glu Ile Gly Ala Tyr Leu Ala Glu Cys Met Glu Leu Ser Thr Glu Leu
                            120
Ile Pro Thr Ser Lys His His Gln Thr Pro Val Tyr Leu Gly Ala Thr
    130
Ala Gly Met Arg Leu Leu Arg Met Glu Ser Glu Gln Ser Ala Asp Glu
                    150
                                        155
Val Leu Ala Ala Val Ser Thr Ser Leu Lys Ser Tyr Pro Phe Asp Phe
                165
                                    170
Gln Gly Ala Lys Ile Ile Thr Gly Gln Glu Gly Ala Tyr Gly Trp
                                185
Ile Thr Ile Asn Tyr Leu Leu Gly Arg Phe Thr Gln Glu Gln Ser Trp
                            200
                                                205
Leu Ser Leu Ile Ser Asp Ser Gln Glu Gln Gly Ser
```

210 215 220

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<210> 277
<211> 719
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (628)...(666)
\langle 223 \rangle n = A, C, G, or T
<400> 277
cttcagcatc ttttctttca ccagcgtttc tgggtgggat ccaggggtgg ggtggaaaac 60
ttgctaaaaa caaagcaaat gtctttcaat attcacaacc ttaaaattat atccaagaaa 120
acaaaggata aataattttt tataaaaata attacttctc aaataacgtt tcacaataga 180
cctgctcaat acatcgatct gactcatctc atctgtgccg cttttcttct ttttaaaatt 240
ctggcctggg acaaaactac atgaaagaaa gtaccattaa attaagggtt actttccaaa 300
aaacaataga aaaatcttaa aagtaaattc acttatatat aaaatattaa ggcctctgca 360
tgagaacggt ttaacatctg gggaactggc ctttcctaac tgacctatga ccccactcac 420
ctcaaacttc agaatgaaag gttctggagt gaaaagtcct tttaattttg ccaatacatg 480
aaattacaca taaaattaca ctgcaaagta atatgtactt aacaaatgat atattgaaaa 540
gtctaacttt ctgctggcta atttcagtat ggacttcaga tcaagtatag tgtattttca 600
gccatatctc ataatctttt gcgacgcngn cgcgaattca agcttactct tncttttca 660
attcanaaga actcgtcaag aaggcgatag aaggcgatgc gctgcgaatc gggagccgg
<210> 278
<211> 219
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (17)...(28)
<223> Xaa = Any amino acid
<400> 278
Gly Ser Arg Phe Ala Ala His Arg Leu Leu Ser Pro Ser Arg Val Leu
                                     10
Xaa Asn Lys Xaa Lys Ser Lys Leu Glu Phe Ala Xaa Ala Ser Gln Lys
                                 25
Ile Met Arg Tyr Gly Lys Tyr Thr Ile Leu Asp Leu Lys Ser Ile Leu
                            40
Lys Leu Ala Ser Arg Lys Leu Asp Phe Ser Ile Tyr His Leu Leu Ser
                        55
Thr Tyr Tyr Phe Ala Val Phe Tyr Val Phe His Val Leu Ala Lys Leu
                                         75
Lys Gly Leu Phe Thr Pro Glu Pro Phe Ile Leu Lys Phe Glu Val Ser
                                     90
                                                         95
                85
```

```
Gly Val Ile Gly Gln Leu Gly Lys Ala Ser Ser Pro Asp Val Lys Pro
             100
                                                      110
Phe Ser Cys Arg Gly Leu Asn Ile Leu Tyr Ile Ser Glu Phe Thr Phe
                             120
Lys Ile Phe Leu Leu Phe Phe Gly Lys Pro Leu Ile Trp Tyr Phe Leu
                         135
Ser Cys Ser Phe Val Pro Gly Gln Asn Phe Lys Lys Lys Ser Gly
145
                     150
                                         155
Thr Asp Glu Met Ser Gln Ile Asp Val Leu Ser Arg Ser Ile Val Lys
                 165
                                     170
                                                          175
Arg Tyr Leu Arg Ser Asn Tyr Phe Tyr Lys Lys Leu Phe Ile Leu Cys
            180
                                 185
                                                      190
Phe Leu Gly Tyr Asn Phe Lys Val Val Asn Ile Glu Arg His Leu Leu
                             200
Cys Phe Gln Val Phe His Pro Thr Pro Gly Ser
    210
                         215
<210> 279
<211> 703
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (582)...(701)
<223> n = A, C, G \text{ or } T
<400> 279
cttcgcatct tttactttcc cagcgtttct gggtgggatc cagcagcaag ttccaccatg 60
atgctctcac cattctttgt gatgaaaggt gtgatgaaga caaagaacac atcgtagatg 120
agaagaaggc ctagcagtat cacgcatgac atgaaattgg gtaacttcat tgttttaatt 180
aagttgagac agaaagcaat tootaagata tootgtaaaa tooaagcoca cotatootca 240
tttcgaaata cagcccacac aacagcaact gagatgcaca gcccggaaag gaaaatcagg 300
ctcactttaa tgtttttgcc acaacacaaa atcgtgcact gtccacatgg catcctatga 360
atcaatgcag aaagacagtt gtacaggctc attgacgatg ctatgcagaa aatcgctatc 420
ataacataca caagccacct gtagaagaaa tacagtaaga caatgtcgac gcggccgcga 480
attcaagctt actcttcctt tttcaattca gaagaactcg tcaagaaggc gatagaaggc 540
gatgcgctgc gaatcgggag cggcgatacc gtaaagcacg angaagcggt caggccattc 600
gccgncaagc tcttcacaat atcacgggta gncaacgcta tgtcctgata gcggtccgnc 660
acacccagcc cggncacagt cgatgaatnc agaaaagcgg nct
                                                                    703
<210> 280
<211> 220
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (1)...(33)
```

```
<400> 280
Xaa Ala Phe Leu Xaa Ser Ser Thr Val Xaa Gly Leu Gly Val Xaa Asp
Arg Tyr Gln Asp Ile Ala Leu Xaa Thr Arg Asp Ile Val Lys Ser Leu
                                 25
Xaa Ala Asn Gly Leu Thr Ala Ser Ser Cys Phe Thr Val Ser Pro Leu
Pro Ile Arg Ser Ala Ser Pro Ser Ile Ala Phe Leu Thr Ser Ser Ser
                         55
Glu Leu Lys Lys Glu Glu Ala Ile Arg Gly Arg Val Asp Ile Val Leu
                     70
                                         75
Leu Tyr Phe Phe Tyr Arg Trp Leu Val Tyr Val Met Ile Ala Ile Phe
                 85
                                     90
Cys Ile Ala Ser Ser Met Ser Leu Tyr Asn Cys Leu Ser Ala Leu Ile
                                 105
                                                     110
His Arg Met Pro Cys Gly Gln Cys Thr Ile Leu Cys Cys Gly Lys Asn
                             120
                                                 125
Ile Lys Val Ser Leu Ile Phe Leu Ser Gly Leu Cys Ile Ser Val Ala
                         135
Val Val Trp Ala Val Phe Arg Asn Glu Asp Arg Trp Ala Trp Ile Leu
                     150
                                         155
                                                              160
Gln Asp Ile Leu Gly Ile Ala Phe Cys Leu Asn Leu Ile Lys Thr Met
                                     170
Lys Leu Pro Asn Phe Met Ser Cys Val Ile Leu Leu Gly Leu Leu
            180
                                 185
Ile Tyr Asp. Val Phe Phe Val Phe Ile Thr Pro Phe Ile Thr Lys Asn
                             200
Gly Glu Ser Ile Met Val Glu Leu Ala Ala Gly Ser
    210
                         215
                                             220
<210> 281
<211> 722
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (698)...(698)
<223> n = A, C, G, or T
<400> 281
cttcagcatc ttttactttc accagcgttt ctgggtggga tcctgtcgat gtgatcctat 60
gactaggtaa gtgtggttca actttaacgt aaatatcatt cttccagaca tatgccaact 120
tatgaccttc tggtgaccat gtgatccact gtgtattatt tggaatcttc tcttctgtga 180
tcagctgtct tttattcaca tcataaatgt tgtatgaagc tgtgtaggaa tgtctccatt 240
gcttcacgta gttgtattcc aagagaacaa acagtcggtc aggtgacact gaatgatatc 300
caaagctttc aaaggtactg ttctccaaga aaatggagct gtttccatgt tcagcattga 360
```

```
gcagcaagat attgttctct tgtttgtaga ggtattcaaa gtctgaaacc caccacaaag 420
 agtaggactt gacccgaaag gtactcttta aatagtcagc tagtgaatac gttctgcggc 480
tgtcagctgc cgcttcatct ttgctcagca gaactattgg cacggtgatg atggtgacaa 540
gcgcagcgac accaagcagt cccagaagaa ccttccacgg tgtcttcatg gtcgggcggc 600
tccttgaaac tgaactctga agcttgagcg cagcagaagt cactgcgcgc agagacggac 660
gtccgtcgac gccggccgcg aattcaagct tactcttnct ttttcaattc agaagaactc 720
qt
<210> 282
<211> 227
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (7)...(7)
<223> Xaa = Any amino acid
<400> 282
Arg Val Leu Leu Asn Lys Xaa Lys Ser Lys Leu Glu Phe Ala Ala Gly
Val Asp Gly Arg Pro Ser Leu Arg Ala Val Thr Ser Ala Ala Leu Lys
                                 25
Leu Gln Ser Ser Val Ser Arg Ser Arg Pro Thr Met Lys Thr Pro Trp
                             40
Lys Val Leu Leu Gly Leu Leu Gly Val Ala Ala Leu Val Thr Ile Ile
                         55
Thr Val Pro Ile Val Leu Leu Ser Lys Asp Glu Ala Ala Asp Ser
                                         75
Arg Arg Thr Tyr Ser Leu Ala Asp Tyr Leu Lys Ser Thr Phe Arg Val
                85
                                     90
Lys Ser Tyr Ser Leu Trp Trp Val Ser Asp Phe Glu Tyr Leu Tyr Lys
            100
                                 105
                                                     110
Gln Glu Asn Asn Ile Leu Leu Leu Asn Ala Glu His Gly Asn Ser Ser
                             120
                                                 125
Ile Phe Leu Glu Asn Ser Thr Phe Glu Ser Phe Gly Tyr His Ser Val
                        135
Ser Pro Asp Arg Leu Phe Val Leu Leu Glu Tyr Asn Tyr Val Lys Gln
145
                    150
                                         155
                                                             160
Trp Arg His Ser Tyr Thr Ala Ser Tyr Asn Ile Tyr Asp Val Asn Lys
                165
                                     170
Arg Gln Leu Ile Thr Glu Glu Lys Ile Pro Asn Asn Thr Gln Trp Ile
            180
                                185
Thr Trp Ser Pro Glu Gly His Lys Leu Ala Tyr Val Trp Lys Asn Asp
                            200
                                                 205
Ile Tyr Val Lys Val Glu Pro His Leu Pro Ser His Arg Ile Thr Ser
    210
                        215
                                             220
Thr Gly Ser
225
```

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<210> 283
<211> 701
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (558)...(701)
<223> n = A, C, G or T
<400> 283
cttcagcatc ttttactttc accagcgttt ctgggtggga tccgtttctt ttctctaaat 60
ctttaattct gaactggcct tgagcgggct tgctttcctt gtctttatag taggcaatga 120
gttgaactgt gtagttctgc tctggcagaa ggccttgaat aatcgctttt gttgcagtgt 180
tctggagatt catctggttg gtctttcctc ctgaagctgg agccacgagc agtttgtagc 240
caccaaattt ccctcttggt gctttccatg aaatctgtat actatcatgg gaaatcacat 300
tatatettaa eettgtgggt ggageeactt gteeeetgae aatggtgeag aaacaageag 360
ccgccaaaaa agctagaatc agccagtccc gcatcttgca ctgccaaatc atcatcttat 420
tttctgcctc ttacatcagg tgcaacagct gcctgtgcag ggcaacgttc cagcccaggt 480
tggggacctc ttggcgccta gggaagatta agtcgacgcg gccgcgaatt caagcttact 540
cttccttttt caattcanaa gaactcgtca agaangcgat agaaggcgat gcgctgcgaa 600
tcgggagcgg cgatcccgta aagcacgagg aagcggncag cccattcgcc gncaagctct 660
tnagcaatat cacgggtagc caacgctatg tnctgatagc n
                                                                   701
<210> 284
<211> 217
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (3)...(47)
<223> Xaa = Any amino acid
<400> 284
Ala Ile Xaa Thr Arg Trp Leu Pro Val Ile Leu Leu Lys Ser Leu Xaa
 1
                                     10
Ala Asn Gly Leu Xaa Ala Ser Ser Cys Phe Thr Gly Ser Pro Leu Pro
                                 25
Ile Arg Ser Ala Ser Pro Ser Ile Ala Phe Leu Thr Ser Ser Xaa Glu
Leu Lys Lys Glu Glu Ala Ile Arg Gly Arg Val Asp Leu Ile Phe Pro
                        55
Arg Arg Gln Glu Val Pro Asn Leu Gly Trp Asn Val Ala Leu His Arg
                    70
                                         75
                                                             80
Gln Leu Leu His Leu Met Glu Ala Glu Asn Lys Met Met Ile Trp Gln
                                    90
Cys Lys Met Arg Asp Trp Leu Ile Leu Ala Phe Leu Ala Ala Ala Cys
            100
                                105
                                                     110
```

```
Phe Cys Thr Ile Val Arg Gly Gln Val Ala Pro Pro Thr Arg Leu Arg
                                                 125
                             120
        115
Tyr Asn Val Ile Ser His Asp Ser Ile Gln Ile Ser Trp Lys Ala Pro
                        135
                                             140
Arg Gly Lys Phe Gly Gly Tyr Lys Leu Leu Val Ala Pro Ala Ser Gly
                    150
                                         155
Gly Lys Thr Asn Gln Met Asn Leu Gln Asn Thr Ala Thr Lys Ala Ile
                                     170
                                                         175
Ile Gln Gly Leu Leu Pro Glu Gln Asn Tyr Thr Val Gln Leu Ile Ala
                                 185
                                                     190
            180
Tyr Tyr Lys Asp Lys Glu Ser Lys Pro Ala Gln Gly Gln Phe Arg Ile
                            200
Lys Asp Leu Glu Lys Arg Asn Gly Ser
                        215
    210
<210> 285
<211> 723
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (600)...(707)
<223> n= A, C, G or T
<400> 285
cttcgcatct tttactttca ccagcgtttc tgggtgggat ccgagcataa ataagacaga 60
qaaaatccat ggatataagt attcttgcag gcaacaccac atagacattt agaaaattac 120
ttaagtgttt tttgaatttt tactttacat gacttcatta attgtacttc cattaaagaa 180
qaqtttqtaa cacatctqta aacaaaaaaq qcatataqca ttctattctt aatqaagaaa 240
qaacatattt aaccacaaag taaaggaata atcacaataa aaagaagagc tttagctcat 300
qaatatatat attgagtgaa tgaataaata tatggtcgac gcggccgcga attcaagctt 360
actcttcctt tttcaattca gaagaactcg tcaagaaggc gatagaaggc gatgcgctgc 420
gaatcgggag cggcgatacc gtaaagcacg aggaagcggt cagcccattc gccgccaagc 480
tetteageaa tateaegggt ageeaaeget atgteetgat ageggteege cacaeceage 540
cggccacagt cgatgaatcc agaaaagcgg ccattttcca ccatgatatt cggcaagcan 600
gcatcgccat gggtcacgac gagatcctcg ccgtcgggca tgcgcgcctt gagcctggcg 660
aacagttcgg ctggcgcgag cccctgatgc tcttcgtcca gatcatnctg atcggcaaga 720
                                                                   723
ccg
<210> 286
<211> 217
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (6)...(41)
<223> Xaa = Any amino acid
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<400> 286
Arg Ser Cys Arg Ser Xaa Ser Gly Arg Arg Ala Ser Gly Ala Arg Ala
Ser Arg Thr Val Arg Gln Ala Gln Gly Ala His Ala Arg Arg Gly
                                 25
Ser Arg Arg Asp Pro Trp Arg Cys Xaa Leu Ala Glu Tyr His Gly Gly
                             40
Lys Trp Pro Leu Phe Trp Ile His Arg Leu Trp Pro Ala Gly Cys Gly
Gly Pro Leu Ser Gly His Ser Val Gly Tyr Pro Tyr Cys Arg Ala Trp
                    70
                                         75
Arg Arg Met Gly Pro Leu Pro Arg Ala Leu Arg Tyr Arg Arg Ser Arg
Phe Ala Ala His Arg Leu Leu Ser Pro Ser Arg Val Leu Leu Asn Lys
            100
                                 105
                                                     110
Arg Lys Ser Lys Leu Glu Phe Ala Ala Ser Thr Ile Tyr Leu Phe
                             120
                                                 125
Ile His Ser Ile Tyr Ile Phe Met Ser Ser Ser Phe Tyr Cys Asp
                        135
                                             140
Tyr Ser Phe Thr Leu Trp Leu Asn Met Phe Phe Leu His Glu Asn Ala
                    150
                                         155
Ile Cys Leu Phe Cys Leu Gln Met Cys Tyr Lys Leu Phe Phe Asn Gly
                165
                                     170
Ser Thr Ile Asn Glu Val Met Ser Lys Asn Ser Lys Asn Thr Val Ile
            180
                                185
                                                     190
Phe Met Ser Met Trp Cys Cys Leu Gln Glu Tyr Leu Tyr Pro Trp Ile
                            200
                                                 205
Phe Ser Val Leu Phe Met Leu Gly Ser
    210
                        215
<210> 287
<211> 705
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (655)...(655)
<223> n= A, C, G or T
<400> 287
cttcagcatc ttttactttc accagcgttt ctgggtggga tccggggtgt gttactggca 60
tctatggagt agatgtaagt aatgttgata aacagcctat aatgcacagc atagcctgac 120
ccccaaaaga agtatacatc ccagaatatc aatggtacag agattgagaa aactctcatt 180
gagggcctag ttgtatttct tgttcaagac aaggttacaa catttcaatt aagagagttc 240
agetetacaa agaagtttta gtegaegegg eegegaatte aagettaete tteettttte 300
aattcagaag aactcgtcaa gaaggcgata gaaggcgatg cgctgcgaat cgggagcggc 360
gataccgtaa agcacgagga agcggtcagc ccattcgccg ccaagctctt caqcaatatc 420
```

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acgggtagec aacgetatgt cetgatageg gteegecaca eecageegge cacagtegat 480
gaatccagaa aagcggccat tttccaccat gatattcggc aagcaggcat cgccatgggt 540
cacgacgaga tectegeegt egggeatgeg egeettgage etggegaaca gtteggetgg 600
cgcgagcccc tgatgctctt cgtccagatc atcctgatcg acaaagaccg gcttncatcc 660
gagtacgtgc tcgctcgatg cgatgtttcg cttggtggtc gaatg
<210> 288
<211> 222
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (17)...(17)
<223> Xaa = Any amino acid
<400> 288
Phe Asp His Gln Ala Lys His Arg Ile Glu Arg Ala Arg Thr Arg Met
Xaa Ala Gly Leu Cys Arg Ser Gly Ser Gly Arg Arg Ala Ser Gly Ala
                                 25
Arg Ala Ser Arg Thr Val Arg Gln Ala Gln Gly Ala His Ala Arg Arg
Arg Gly Ser Arg Arg Asp Pro Trp Arg Cys Leu Leu Ala Glu Tyr His
Gly Gly Lys Trp Pro Leu Phe Trp Ile His Arg Leu Trp Pro Ala Gly
                    70
                                         75
Cys Gly Gly Pro Leu Ser Gly His Ser Val Gly Tyr Pro Tyr Cys Arg
                85
                                     90
Ala Trp Arg Arg Met Gly Pro Leu Pro Arg Ala Leu Arg Tyr Arg Arg
            100
                                 105
                                                     110
Ser Arg Phe Ala Ala His Arg Leu Leu Ser Pro Ser Arg Val Leu Leu
                             120
                                                 125
Asn Lys Arg Lys Ser Lys Leu Glu Phe Ala Ala Ala Ser Thr Lys Thr
                        135
                                             140
Ser Leu Ser Thr Leu Leu Ile Glu Met Leu Pro Cys Leu Glu Gln Glu
                    150
                                         155
Ile Gln Leu Gly Pro Gln Glu Phe Ser Gln Ser Leu Tyr His Tyr Ser
                165
                                     170
Gly Met Tyr Thr Ser Phe Gly Gly Gln Ala Met Leu Cys Ile Ile Gly
            180
                                 185
Cys Leu Ser Thr Leu Leu Thr Ser Thr Pro Met Pro Val Thr His Pro
                            200
Gly Ser His Pro Glu Thr Leu Val Lys Val Lys Asp Ala Glu
                        215
                                             220
```

705

<210> 289 <211> 722

<212> DNA

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<213> Mus musculus
 <220>
 <221> unsure
 <222> (702)...(722)
 <223> n= A, C, G or T
 <400> 289
cttcagcatc ttttactttc accagcgttt ctgggtggga tcccaggagt tttccttcgc 60
tgataaaggg ttctgggaag caggtagcag cagagatggt acagacagca tctcccacat 120
agaaaataca ccccattatc atcattttc caaaacgagg ttcaatgggg agtttagcca 180
ggattcgtcc aagaggagtc aactcatcat tggcatctaa agcatcaagt tctcttagag 240
tatgctctgc ttcaattaca gcatccaaag gtggaggttc gattgccttt gcaaggaatt 300
ggccaattcc tcctagacgc agaagtttta tgctcagagc aatttcatgc aatggtgttc 360
taaacatctc tggtgtcatg tgggtctcta gtctaaaatt tagaagtaga aaagtcaaac 420
atgacaacat aacaaaaatc tttgcataaa aaaactgggt attatagtgg ccctttccta 480
gtctatacca cacaactttt cctattgact acaaaactag actagttgac tgaaaactgg 540
ctcctgactt tactttcaca gccagggtat cttttaactg ataagtagag gagtaaggaa 600
aaaagttaat gctaacactt ctaactatgg ctactaccta ccgatcctac ctattaacaa 660
gcacggacaa caacaaaacg ggcccaaact cagcaaaagg cnggacataa atataataaa 720
cn
                                                                    722
<210> 290
<211> 237
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (7)...(7)
<223> Xaa = Any amino acid
<400> 290
Val Tyr Tyr Ile Tyr Val Xaa Pro Phe Ala Glu Phe Gly Pro Val Leu
Leu Leu Ser Val Leu Val Asn Arg Asp Arg Val Val Ala Ile Val Arg
Ser Val Ser Ile Asn Phe Phe Pro Tyr Ser Ser Thr Tyr Gln Leu Lys
                            40
Asp Thr Leu Ala Val Lys Val Lys Ser Gly Ala Ser Phe Gln Ser Thr
                        55
Ser Leu Val Leu Ser Ile Gly Lys Val Val Trp Tyr Arg Leu Gly Lys
                    70
                                        75
Gly His Tyr Asn Thr Gln Phe Phe Tyr Ala Lys Ile Phe Val Met Leu
                85
                                    90
Ser Cys Leu Thr Phe Leu Leu Leu Asn Phe Arg Leu Glu Thr His Met
                                105
                                                     110
Thr Pro Glu Met Phe Arg Thr Pro Leu His Glu Ile Ala Leu Ser Ile
                            120
                                                 125
Lys Leu Arg Leu Gly Gly Ile Gly Gln Phe Leu Ala Lys Ala Ile
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130
                         135
                                              140
Glu Pro Pro Pro Leu Asp Ala Val Ile Glu Ala Glu His Thr Leu Arg
145
                     150
                                         155
Glu Leu Asp Ala Leu Asp Ala Asn Asp Glu Leu Thr Pro Leu Gly Arg
                 165
                                      170
                                                          175
Ile Leu Ala Lys Leu Pro Ile Glu Pro Arg Phe Gly Lys Met Met Ile
             180
                                 185
Met Gly Cys Ile Phe Tyr Val Gly Asp Ala Val Cys Thr Ile Ser Ala
                             200
                                                  205
Ala Thr Cys Phe Pro Glu Pro Phe Ile Ser Glu Gly Lys Leu Leu Gly
                         215
                                             220
Ser His Pro Glu Thr Leu Val Lys Val Lys Asp Ala Glu
225
                     230
<210> 291
<211> 703
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (547)...(702)
<223> n= A, C, G or T
<400> 291
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tgggctcccc tccaaaggtg atgttggcac ccaccaggag gtgcatgcca gcgctgcaca 180
gcgggaagta agggggctcg atgtaatgcc ctgctgctgg gtagcagatg atctggggct 240
tctccttccc gtgcgcctgc aggcgtttgg agatctcatc agcatagaac tcgctcttcc 300
agttgtggtc gtcctgacct acgaggaaca ggaaggtcgt gtcagacctt tccacgggaa 360
tgaagctctt cttgtctacc agagggcttt gcagagcttc cacgacatcc aagagaccat 420
ctttggtcat tttgacttgg tttctcagaa gggacacagg gggtatagtc tcatccttgt 480
aggagatggt gttcccaaca gcagccacgg agccattgat gaccacagca gctgtgatgc 540
ccttcangaa ggaggccata ncaaggccaa gttcaccccc tttggaaatc ccaagcagcc 600
caattccagg tccttttacc tcggggtggc tgcgcangta gttcacggct tcttcaaagt 660
actccatgtg catgggttct atgctcttgg ggaaggtcgt cnt
                                                                    703
<210> 292
<211> 703
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (695)...(695)
<223> n= A, C, G or T
<400> 292
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cttcagcatc ttttactttc accagcgttt ctgggtggga tccactcttg ctacccaact 60
gtttgtggaa gaaagtctgg agctgctgcc atgcgtccac ctgggccacg gcatgagccc 120
tgggctcccc tccaaaggtg atgttggcac ccaccaggag gtgcatgcca gcgctgcaca 180
gcgggaagta agggggctcg atgtaatgcc ctgctgctgg gtagcagatg atctggggct 240
tctccttccc gtgcgcctgc aggcgtttgg agatctcatc agcatagaac tcgctcttcc 300
agttgtggtc gtcctgacct acgaggaaca ggaaggtcgt gtcagacctt tccacgggaa 360
tgaagctctt cttgtctacc agagggcttt gcagagcttc cacgacatcc aagagaccat 420
ctttggtcat tttgacttgg tttctcagaa gggacacagg gggtatagtc tcatccttgt 480
aggagatggt gttcccaaca gcagccacgg agccattgat gaccacagca gctgtgatgc 540
ccttcaggaa ggaggccata gcaaggccaa gttcaccccc tttggaaatc ccaagcagcc 600
caattccagg tccttttacc tcggggtggc tgcgcaggta gttcacggct tcttcaaaag 660
tactccatgt gcatggtttc tatgctcttg gggangtcgt cgt
                                                                    703
<210> 293
<211> 231
<212> PRT
<213> Mus musculus
<400> 293
Thr Ser Pro Arg Ala Lys Pro Cys Thr Trp Ser Thr Phe Glu Glu Ala
                                     10
Val Asn Tyr Leu Arg Ser His Pro Glu Val Lys Gly Pro Gly Ile Gly
                                 25
Leu Leu Gly Ile Ser Lys Gly Glu Leu Gly Leu Ala Met Ala Ser
                             40
Phe Leu Lys Gly Ile Thr Ala Ala Val Val Ile Asn Gly Ser Val Ala
                        55
Ala Val Gly Asn Thr Ile Ser Tyr Lys Asp Glu Thr Ile Pro Pro Val
                                         75
Ser Leu Leu Arg Asn Gln Val Lys Met Thr Lys Asp Gly Leu Leu Asp
                                     90
Val Val Glu Ala Leu Gln Ser Pro Leu Val Asp Lys Lys Ser Phe Ile
                                105
                                                     110
Pro Val Glu Arg Ser Asp Thr Thr Phe Leu Phe Leu Val Gly Gln Asp
                            120
                                                 125
Asp His Asn Trp Lys Ser Glu Phe Tyr Ala Asp Glu Ile Ser Lys Arg
                        135
                                             140
Leu Gln Ala His Gly Lys Glu Lys Pro Gln Ile Ile Cys Tyr Pro Ala
                    150
                                        155
Ala Gly His Tyr Ile Glu Pro Pro Tyr Phe Pro Leu Cys Ser Ala Gly
                165
                                     170
Met His Leu Leu Val Gly Ala Asn Ile Thr Phe Gly Gly Glu Pro Arg
            180
                                185
Ala His Ala Val Ala Gln Val Asp Ala Trp Gln Gln Leu Gln Thr Phe
                            200
                                                205
Phe His Lys Gln Leu Gly Ser Lys Ser Gly Ser His Pro Glu Thr Leu
                        215
                                            220
Val Lys Val Lys Asp Ala Glu
225
                    230
```

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<210> 294
<211> 623
<212> DNA
<213> Mus musculus
<400> 294
gaattcgcgg ccggcgtcga cgaaacagga tctcccttct ctgctcagag atgagcaaat 60
gccataatta cgacctcaag ccagcaaagt gggatacttc tcaagaacaa cagaaacaaa 120
gattagcact aactaccagt caacctggag aaaatggtat cataagagga agatacccta 180
tagaaaaact caaaatatct ccaatgttcg ttgttcgagt ccttgctata gccttggcaa 240
ttcgattcac ccttaacaca ttgatgtggc ttgccatttt caaagagacg tttcagccag 300
tattgtgcaa caaggaagtc ccagtttcct caagagaggg ctactgtggc ccatgcccta 360
acaactggat atgtcacaga aacaactgtt accaattttt taatgaagag aaaacctgga 420
accagageca agetteetqt ttgteteaaa atteeageet tetgaagata tacagtaaag 480
aagaacagga tttcttaaag ctggttaagt cctatcactg gatgggactg gtccagatcc 540
cagcaaatgg ctcctggcag tgggaagatg gctcctctct ctcatacaat cagttaactc 600
tggtggaaat accaaaagga tcc
                                                                    623
<210> 295
<211> 226
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (17)...(17)
<223> Xaa = Any amino acid
<400> 295
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Xaa Glu Ala Ile Arg Gly Arg Arg Arg Asn Arg Ile Ser Leu Leu
                                 25
Cys Ser Glu Met Ser Lys Cys His Asn Tyr Asp Leu Lys Pro Ala Lys
Trp Asp Thr Ser Gln Glu Gln Gln Lys Gln Arg Leu Ala Leu Thr Thr
                        55
Ser Gln Pro Gly Glu Asn Gly Ile Ile Arg Gly Arg Tyr Pro Ile Glu
                    70
                                         75
Lys Leu Lys Ile Ser Pro Met Phe Val Val Arq Val Leu Ala Ile Ala
Leu Ala Ile Arg Phe Thr Leu Asn Thr Leu Met Trp Leu Ala Ile Phe
            100
                                105
                                                     110
Lys Glu Thr Phe Gln Pro Val Leu Cys Asn Lys Glu Val Pro Val Ser
                            120
                                                 125
Ser Arg Glu Gly Tyr Cys Gly Pro Cys Pro Asn Asn Trp Ile Cys His
                        135
                                             140
Arg Asn Asn Cys Tyr Gln Phe Phe Asn Glu Glu Lys Thr Trp Asn Gln
145
                    150
                                        155
                                                             160
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Ser Gln Ala Ser Cys Leu Ser Gln Asn Ser Ser Leu Leu Lys Ile Tyr
                                                         175
                                     170
                165
Ser Lys Glu Glu Gln Asp Phe Leu Lys Leu Val Lys Ser Tyr His Trp
                                 185
Met Gly Leu Val Gln Ile Pro Ala Asn Gly Ser Trp Gln Trp Glu Asp
                             200
Gly Ser Ser Leu Ser Tyr Asn Gln Leu Thr Leu Val Glu Ile Pro Lys
                                             220
                         215
    210
Gly Ser
225
<210> 296
<211> 317
<212> DNA
<213> Mus musculus
<400> 296
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tectagaete etggattgeg etgtataata eeegaggttt etgeattgee gtggetgtat 120
ttcttcacta ttttctcttg gtctcattca catggatggg attagaagca ttccacatgt 180
acctagcact ggtcaaggtg tttaatactt acatccgaaa gtacatcctt aaattctgca 240
ttgttggctg gggcatacca gctgtggttg tgtccatcgt cctgactata tccccagata 300
                                                                    317
actatgggat tggatcc
<210> 297
<211> 232
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (2)...(23)
<223> Xaa = Any amino acid
<400> 297
Ile Xaa Thr Lys Ser Ile Arg Gly Ser Arg Gln Pro Asn Cys Ser Pro
                                                         15
 1
                                     10
Gly Ser Arg Arg Ala Cys Xaa Thr Ala Arg Ile Ser Ser Pro Met Ala
                                 25
Met Pro Ala Cys Arg Ile Ser Trp Trp Lys Met Ala Ala Phe Leu Asp
                             40
                                                 45
Ser Ser Thr Val Ala Gly Trp Val Trp Arg Thr Ala Ile Arg Thr Arg
                        55
Trp Leu Pro Val Ile Leu Leu Lys Ser Leu Ala Ala Asn Gly Leu Thr
                    70
                                         75
                                                              80
Ala Ser Ser Cys Phe Thr Val Ser Pro Leu Pro Ile Arg Ser Ala Ser
                                     90
Pro Ser Ile Ala Phe Leu Thr Ser Ser Ser Glu Leu Lys Lys Glu Glu
            100
                                 105
                                                     110
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Ala Ile Arg Gly Arg Val Asp Gln Leu Cys Ala Ala Leu Leu Leu Leu
        115
                             120
Asn Leu Ile Phe Leu Leu Asp Ser Trp Ile Ala Leu Tyr Asn Thr Arg
                         135
                                             140
Gly Phe Cys Ile Ala Val Ala Val Phe Leu His Tyr Phe Leu Leu Val
                     150
                                         155
Ser Phe Thr Trp Met Gly Leu Glu Ala Phe His Met Tyr Leu Ala Leu
                 165
                                     170
                                                          175
Val Lys Val Phe Asn Thr Tyr Ile Arg Lys Tyr Ile Leu Lys Phe Cys
                                 185
                                                      190
Ile Val Gly Trp Gly Ile Pro Ala Val Val Ser Ile Val Leu Thr
                             200
Ile Ser Pro Asp Asn Tyr Gly Ile Gly Ser His Pro Glu Thr Leu Val
                         215
                                             220
Lys Val Lys Asp Ala Glu Asp Gln
225
                     230
<210> 298
<211> 686
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (5)...(5)
<223> n= A, C, G or T
<400> 298
tcttntagtt tgacaggcaa catcccaaaa acttttcgaa gcatttgttc agatcttcag 60
tattttccag ttttcataca gtctcggggt ttcaaaacgt tgaaatcaag gacacgacgt 120
ttgcagtcta cctctgaaag attagtagaa gcacagaata tagcccatca tttgtgaagg 180
ggtttctttt gcgggacaga ggaacagatc ttgagagttt ggacaaactt atgaaaacta 240
aaaacatacc tgaagctcac caagatgcat ttaaaactgg ttttgcagag ggttttctca 300
aagctcaagc tcttacacag aagaccaatg attccttaag gcgaactcgt ctgatcctct 360
ttgttttgct cctgtttggc atttatggac tcttaaaaaa tccgttttta tctgtgcgct 420
ttcggacaac tacaggactt gattctgcgg tagaccctgt ccagatgaaa aatgtcactt 480
ttgaacatgt taaaggggtg gaggaagcca aacaagagtt acaggaagtg gttgaattct 540
tgaaaaatcc acagaagttt actgtgcttg gaggtaaact tcccaaagga attcttttag 600
ttgggccacc aggaacaggg aagacgcttc ttgcccgagc tgtggcagga gaagctgacg 660
tcccttttta ttatgcttct ggatcc
                                                                   686
<210> 299
<211> 237
<212> PRT
<213> Mus musculus
<220>
<221> UNSURE
<222> (1)...(1)
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<400> 299
Xaa Phe Asp Arg Gln His Pro Lys Asn Phe Ser Lys His Leu Phe Arg
Ser Ser Val Phe Ser Ser Phe His Thr Val Ser Gly Phe Gln Asn Val
                                 25
Glu Ile Lys Asp Thr Thr Phe Ala Val Tyr Leu Lys Ile Ser Arg Ser
Thr Glu Tyr Ser Pro Ser Phe Val Lys Gly Phe Leu Leu Arg Asp Arg
Gly Thr Asp Leu Glu Ser Leu Asp Lys Leu Met Lys Thr Lys Asn Ile
                     70
                                         75
Pro Glu Ala His Gln Asp Ala Phe Lys Thr Gly Phe Ala Glu Gly Phe
                85
                                     90
Leu Lys Ala Gln Ala Leu Thr Gln Lys Thr Asn Asp Ser Leu Arg Arg
            100
                                 105
                                                     110
Thr Arg Leu Ile Leu Phe Val Leu Leu Phe Gly Ile Tyr Gly Leu
                             120
Leu Lys Asn Pro Phe Leu Ser Val Arg Phe Arg Thr Thr Gly Leu
                        135
                                             140
Asp Ser Ala Val Asp Pro Val Gln Met Lys Asn Val Thr Phe Glu His
                    150
                                         155
Val Lys Gly Val Glu Glu Ala Lys Gln Glu Leu Gln Glu Val Val Glu
                165
                                     170
Phe Leu Lys Asn Pro Gln Lys Phe Thr Val Leu Gly Gly Lys Leu Pro
            180
                                 185
Lys Gly Ile Leu Leu Val Gly Pro Pro Gly Thr Gly Lys Thr Leu Leu
                            200
Ala Arg Ala Val Ala Gly Glu Ala Asp Val Pro Phe Tyr Tyr Ala Ser
                        215
                                             220
Gly Ser His Pro Glu Thr Leu Val Lys Val Lys Asp Ala
225
                    230
                                         235
<210> 300
<211> 705
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (655)...(655)
<223> n= A, C, G or T
<400> 300
cttcagcatc ttttactttc accagcgttt ctgggtggga tccggggtgt gttactggca 60
tctatggagt agatgtaagt aatgttgata aacagcctat aatgcacagc atagcctgac 120
ccccaaaaga agtatacatc ccagaatatc aatggtacag agattgagaa aactctcatt 180
```

gagggcctag ttgtatttct tgttcaagac aaggttacaa catttcaatt aagagagttc 240

```
agototacaa agaagtttta gtogaogogg cogogaatto aagottacto ttoottttto 300
aattcagaag aactcgtcaa gaaggcgata gaaggcgatg cgctgcgaat cgggagcggc 360
gataccgtaa agcacgagga agcggtcagc ccattcgccg ccaagctctt cagcaatatc 420
acgggtagcc aacgctatgt cctgatagcg gtccgccaca cccagccggc cacagtcgat 480
gaatccagaa aagcggccat tttccaccat gatattcggc aagcaggcat cgccatgggt 540
cacgacgaga tectegeegt eggeatgeg egeettgage etggegaaca gtteggetgg 600
cgcgagcccc tgatgctctt cgtccagatc atcctgatcg acaaagaccg gcttncatcc 660
gagtacgtgc tcgctcgatg cgatgtttcg cttggtggtc gaatg
                                                                   705
<210> 301
<211> 723
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (600)...(707)
<223> n= A, C, G or T
<400> 301
cttcgcatct tttactttca ccagcgtttc tgggtgggat ccgagcataa ataagacaga 60
gaaaatccat ggatataagt attcttgcag gcaacaccac atagacattt agaaaattac 120
ttaagtgttt tttgaatttt tactttacat gacttcatta attgtacttc cattaaagaa 180
gagtttgtaa cacatctgta aacaaaaaag gcatatagca ttctattctt aatgaagaaa 240
gaacatattt aaccacaaag taaaggaata atcacaataa aaagaagagc tttagctcat 300
gaatatatat attgagtgaa tgaataaata tatggtcgac gcggccgcga attcaagctt 360
actcttcctt tttcaattca gaagaactcg tcaagaaggc gatagaaggc gatgcgctgc 420
gaatcgggag cggcgatacc gtaaagcacg aggaagcggt cagcccattc gccgccaagc 480
tcttcagcaa tatcacgggt agccaacgct atgtcctgat agcggtccgc cacacccagc 540
cggccacagt cgatgaatcc agaaaagcgg ccattttcca ccatgatatt cggcaagcan 600
gcatcgccat gggtcacgac gagatcctcg ccgtcgggca tgcgcgcctt gagcctggcg 660
aacagttcgg ctggcgcgag cccctgatgc tcttcgtcca gatcatnctg atcggcaaga 720
ccg
                                                                   723
<210> 302
<211> 610
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (495)...(571)
<223> n= A, C, G or T
<400> 302
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caggagcaca gtcctgacag gagtgtcctg cggtgccagg aggacagaca cagagctcca 120
acagcaatgc cgcctcgccc tcagcgggca gctcgacagc tttccggcca acctccatgg 180
aaatgttggc aattctgctc tgctgcagtc cctggccgta tgatgctttg atgaggatgt 240
agtcaatatt gctgagaaca gacataaaat cagagtgtgt gacgtgtttc tcagacacgg 300
```

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agttaaaata tttccagaat tcaagcttac tcttcctttt tcaattcaga agaactcgtc 360
aagaaggcga tagaaggcga tgcgctgcga atcgggagcg gcgataccgt aaagcacgag 420
gaagcggtca gcccattcgc cgccaagctc ttcagcaata tcacgggtag ccaacgctat 480
gtcctgatag cggtncgcca cacccagccg gccacagtcg atgaatccag aaaagcgqtc 540
attttccacc atgatattcg gcaagcaggc ntcgccatgg gtcacgacga agatcctcgc 600
ccgtccggcg
                                                                   610
<210> 303
<211> 606
<212> DNA
<213> Mus musculus
<400> 303
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cagcgtcatc aggagaaagg cgactggggg cttctgcata ctcaaagtta ggcccagctg 120
gatccgaaca accataacca tccagaaatt ttcttctggt tcattgaaga actgtctgtt 180
cttctgtgtg tgtaaagatt ttgcaggttt cgatgggcta aaagtccttg taaactgtac 240
aattgcttca cataatccaa catttctaat tttttcattc ttttctactt catttggatg 300
gtaaaacaga attttattt cttcctctc cccgcgggcc cgaattcaag cttactcttc 360
ctttttcaat tcagaagaac tcgtcaagaa ggcgatagaa ggcgatgcgc tgcgaatcgg 420
gagcggcgat accgtaaagc acgaggaagc ggtcagccca ttcgccgcca agctcttcag 480
caatatcacg ggtagccaac gctatqtcct gatagcggtc cgccacaccc agccggccac 540
agtcgatgaa tccagaaaag cggccatttt ccaccatgat attcggcaag caggcatcgc 600
catggg
                                                                   606
<210> 304
<211> 608
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (589)...(589)
<223> n= A, C, G or T
<400> 304
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gcccaagctg ctgacgcaaa aagaaaaaa aaaagaaaga aagatgctgc tcatttgcat 120
gctcacttac atatatttgc atgttcactg acccagcctg agctctcccc agcctcgtgg 180
gtggtgactt ttcctgcagg gcgcacgccc tgctgcagcc ccctcccccg cgggcccgaa 240
ttcaagctta ctcttccttt ttcaattcag aagaactcgt caagaaggcg atagaaggcg 300
atgcgctgcg aatcgggagc ggcgataccg taaagcacga ggaagcggtc agcccattcg 360
ccgccaagct cttcagcaat atcacgggta gccaacgcta tgtcctgata gcggtccgcc 420
acacccagcc ggccacagtc gatgaatcca gaaaagcggc cattttccac catgatattc 480
ggcaagcagg catcgccatg ggtcacgacg agatcctcgc cgtcgggcat gcgcgccttg 540
agectggega acagttegge tggegegage ecetgatget ettegteana teatectgat 600
cgacaagg
                                                                  608
<210> 305
<211> 635
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<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (596)...(635)
<223> n= A, C, G or T
<400> 305
ggatcccaat cctqctqctq qaqtqctctc qcaaacccct qctqtcqcct qqaaaaaaqt 60
gcccaagctg ctgacgcaaa aagaaaaaa aaaagaaaga aagatgctgc tcatttgcat 120
gctcacttac atatatttgc atgttcactg acccagectg ageteteece ageetegtgg 180
qtqqtqactt ttcctqcaqq qcqcacqccc tgctgcagcc ccctcccccg cgggcccgaa 240
ttcaagctta ctcttccttt ttcaattcag aagaactcgt caagaaggcg atagaaggcg 300
atgcgctgcg aatcgggagc ggcgataccg taaagcacga ggaagcggtc agcccattcg 360
ccgccaaget etteageaat ateacgggta gecaacgeta tgteetgata geggteegee 420
acacccagcc ggccacagtc gatgaatcca gaaaagcggc cattttccac catgatattc 480
ggcaaqcagg catcgccatg ggtcacqacg agatcctcgc cgtcgggcat gcgcgccttg 540
agectggega acagttegge tggegegage ecetgatget ettegteeag ateatnetga 600
tcgacaagac cggctttcat tccgagtacg tgctn
                                                                   635
<210> 306
<211> 635
<212> DNA
<213> Mus musculus
<400> 306
ggatcccacg gggaaaggtg gcacaggtgc tattgtggaa tgccacggac ccggtgtcga 60
ttccatctcc tgcactggca tggcaactat ctgcaacatg ggtgcagaaa ttggggccac 120
tacatcagtg ttcccataca accacaggat gaaaaagtac ctgagcaaga caggccgaac 180
agacattgcc aacctagcag aagaattcaa gcttactctt cctttttcaa ttcagaagaa 240
ctcgtcaaga aggcgataga aggcgatqcg ctgcgaatcg ggagcggcga taccgtaaag 300
cacgaggaag cggtcagccc attcgccgcc aagctcttca gcaatatcac gggtagccaa 360
cgctatgtcc tgatagcggt ccgccacacc cagccggcca cagtcgatga atccagaaaa 420
gcggccattt tccaccatga tattcggcaa gcaggcatcg ccatgggtca cgacgagatc 480
ctcgccgtcg ggcatgcgcg ccttgagcct ggcgaacaag ttcggctggc gcgagcccct 540
gatgctcttc gtccagatca tcctgatcga caaagaccgg ctttcatccg agtacctgct 600
cgctcgatgc gatgtttcct tggggggcga atggg
                                                                   635
<210> 307
<211> 635
<212> DNA
<213> Mus musculus
<400> 307
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ttccatctcc tgcactggca tggcaactat ctgcaacatg ggtgcagaaa ttggggccac 120
tacgtcagtg ttcccataca accacaggat gaaaaagtac ctgagcaaga caggccgaac 180
agacattgcc aacctagcag aagaattcaa gcttactctt cctttttcaa ttcagaagaa 240
ctcgtcaaga aggcgataga aggcgatgcg ctgcgaatcg ggagcggcga taccgtaaag 300
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cacgaggaag cggtcagccc attcgccgcc aagctcttca gcaatatcac gggtagccaa 360
cgctatgtcc tgatagcggt ccgccacacc cagccggcca cagtcgatga atccagaaaa 420
gcggccattt tccaccatga tattcggcaa gcaggcatcg ccatgggtca cgacgagatc 480
ctcgccgtcg ggcatgcgcg ccttgagcct ggcgaacagt tcggctggcg cgagccctg 540
atgctcttcg tccagatcat cctgatcgac aagaccggct ttcattccga gtacgtgctc 600
gctcgatgcg atgtttcgct tggtggtcga atggg
                                                                 635
<210> 308
<211> 635
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (524)...(524)
<223> n= A, C, G or T
<400> 308
ggatccctgc ggccactgcc cagagagaat cgttacaatc acaggcccaa ctgacgccat 60
cttcaaggcc tttgctatga tcgcgtacaa gtttgaggag gacatcatta attccatgag 120
caacagcccc gccccgcgg gcccgaattc aagcttactc ttcctttttc aattcagaag 180
aactcgtcaa gaaggcgata gaaggcgatg cgctgcgaat cgggagcggc gataccgtaa 240
agcacgagga agcggtcagc ccattcgccg ccaagctctt cagcaatatc acgggtagcc 300
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aagcggccat tttccaccat gatattcggc aagcaggcat cgccatgggt cacgacgaga 420
tectegeegt egggeatgeg egeettgage etggegaaca gtteggetgg egegageeee 480
tgatgctctt cgtccagatc atcctgatcg acaagaccgg cttncatccg agtacgtgct 540
cgctcgatgc gatgtttcgc ttggtggtcg aatgggcagg tagccggatc aaagcgtatg 600
cagcccgccg cattgcatca gccatgatgg atact
                                                                 635
<210> 309
<211> 631
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (580)...(597)
<223> n= A, C, G or T
<400> 309
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ctagaaacat agacatatga agaaaataaa aataactcgg tagagctggg cattgtggta 120
catattttta gtcctagcat ttgggagaca acagaaagcg gagcgctgtg ggctcaaatc 180
tagcctgatc cacatggtga gtgagttcta ggccaaccga ggatgagaac ttgtctcaaa 240
acagttttta aagaaaatac tctagaataa aacagaacta agcaccacca ccagtagagt 300
gcacagaaat aagacacact ggtgctgaat atttcatagc ctgtgtgtgt ctgtccttcc 360
tttcctttat gtttttttt gagacagggt ttctctgtgt agccctggct gttctggaac 420
tcactctgta gaccatgctg gcctcaaact cagaaatttg cctgcctctg cctcccaagt 480
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acateteaaa eactggetee eeettegtgg tacceetetn acagagteee tteeetneee 600
tctttctttc tcctgtgaga gtgtgcccgc g
                                                                   631
<210> 310
<211> 603
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (512)...(597)
<223> n= A, C, G or T
<400> 310
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agcacttagg caatattgtt agtcttagtg agtagttcac atctttacaa aagcatgctc 180
tecetateca ttgggeeeae aataacaete tetttgagge cattetgaat eetgtetegt 240
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aagcggtcag cccattcgcc gccaagctct tnagcaatat cacgggtagc caacgctatg 540
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ttt
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<210> 311
<211> 608
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (489)...(596)
<223> n= A, C, G or T
<400> 311
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cctgagcctt ttcaaccata tctatttcaa gaagcccctg aacatctact ttggctttat 180
tcctgagatc atcttcatgt cctcgttgtt tggctacctg gtcatcctta tcttttacaa 240
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```

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<211> 637
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (117)...(627)
<223> n= A, C, G or T
<400> 312
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ctttagtagg ctaacttttt aaacattcca caagaggaag tgcccgcggg cctgaattca 180
agettactet teetttttea atteagaaga actegteaag aaggegatag aaggegatge 240
gctgcgaatc gggagcggcg ataccgtaaa gcacqaqqaa gcgqtcaqcc cattcgccqc 300
caagetette ageaatatea egggtageea aegetatgte etgatagegg teegeeacae 360
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<210> 313
<211> 607
<212> DNA
<213> Mus musculus
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gcgcgccttg agcctggcga acagttcggc tggcgcgagc ccctgatgct cttcgtccag 480
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gcttggtggt cgaatgggca ggtagccgga tcaagcgtat gcagccgccg cattgcatca 600
gccatga
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<210> 314
<211> 633
<212> DNA
<213> Mus musculus
<400> 314
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taggctaact ttttaaacat tccacaagag gaagggcccg cgggcccgaa ttcaagctta 180
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<210> 315
<211> 631
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (7)...(631)
<223> n= A, C, G or T
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nnnntntnat nngcnaantt nnnaanngtt acncaagang aantgtccnt tnnccnatat 180
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<210> 316
<211> 607
<212> DNA
<213> Mus musculus
<400> 316
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tgacagg
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<211> 225
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (13)...(204)
<223> n= A, C, G or T
<400> 317
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gaatactcat actcttcctt tttcaatatt attgaagcat ttatcagggt tattgtctca 120
tgagcggata catatttgaa tgtattctgc agaagaacat gtgagcaaaa ggccagcnna 180
aggccntnan ccggaaaaag gccncgctgc tggctttttt ccata
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<210> 318
<211> 633
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (8)...(630)
<223> n= A, C, G or T
<400> 318
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<210> 319
<211> 645
<212> DNA
<213> Mus musculus
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```

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<210> 320
<211> 289
<212> DNA
<213> Mus musculus
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<210> 321
<211> 684
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (124)...(153)
<223> n= A, C, G or T
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<210> 322
<211> 719
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (628)...(666)
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gccatatctc ataatctttt gcgacgcngn cgcgaattca agcttactct tnctttttca 660
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<211> 655
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> (16)...(85)
<223> n= A, C, G or T
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<210> 324
<211> 677
<212> DNA
<213> Mus musculus
<220>
<221> unsure
<222> 1
<223> n= A,C, G or T
<400> 324
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 $\langle 223 \rangle$ n= A, C, G or T

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